DOCUMENT RESUME

ED 304 983 HE 022 286

TITLE	Annual Report on Higher Education in New Jersey, 1985-86.
INSTITUTION	New Jersey State Dept. of Higher Education, Trenton.
PUB DATE	Dec 86
NOTE	52p.; For a related document, see HE 022 285.
PUB TYPE	Statistical Data (110) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Access to Education; Allied Health Occupations; Annual Reports; *College Environment; College Faculty; Curriculum Development; Educational Assessment; *Educational Finance; Enrollment Influences; Equal Education; *Excellence in Education; Faculty Development; Financial Support; *Higher Education; Institutional Characteristics; Minority Groups; Private Colleges; Public Colleges; *State Action; State Surveys; Undergraduate Study
IDENTIFIERS	Challenge Grants; *New Jersey

ABSTRACT

The New Jersey annual report on higher education in the state highlights accomplishments during 1985-1986. Five sections look at the following topics: (1) introduction; (2) the foundations of excellence (funding to reward excellence and excellence throughout the institution); (3) equity/access (minority enrollment initiatives, basic skills, affirmative action, and student assistance); (4) special issues (evaluating the outcomes of higher education, medical education policy initiatives, and sector study commissions); and (5) system status report (size of the system, budget and finance, funding policies and formulas, and state college autonomy). Two appendices provide tables on finances, student academic ability, programs/degrees, enrollment, and faculty and on membership of the advisory boards and groups. A map shows the locations of New Jersey colleges and universities. Twelve figures include special initiative funding to New Jersey collegiate sectors, full-time faculty at New Jersey public colleges and universities, and total expenditures by New Jersey higher education by collegiate sector. (SM)

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ANNUAL REPORT ON HIGHER EDUCATION IN NEW JERSEY

1985–86

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STATE OF NEW JERSEY
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TO: THE HONORABLE THOMAS H. KEAN,
GOVERNOR OF THE STATE OF NEW JERSEY
THE HONORABLE MEMBERS OF
THE NEW JERSEY LEGISLATURE

Over the past year, the Board of Higher Education intensified its efforts to provide the highest quality education to everyone who chooses to pursue it. With the continued support of the Governor and the Legislature, our institutions have accelerated their drive toward excellence while simultaneously creating and sustaining academic and financial programs that offer all students the opportunity for a college education.

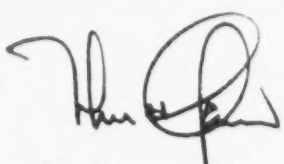
The Board's twin goals of access and excellence are easily stated, yet difficult – some would say impossible – to achieve. Certainly, implementing these goals requires persistence as well as patience. More important, the effort demands the collaboration of all segments of our campus communities in combining and channelling varied purposes to attain these shared goals.

New Jersey has made its colleges and universities a first priority in allocating state resources. We have much to thank the Governor and the Legislature for, but especially for their confidence in our ability to use these resources in the best interest of the public. Our colleges and universities have warranted the public trust, achieving national recognition in several respects, the most important being in the effectiveness of their educational programs.

This report highlights many of the accomplishments of the past year, and should be read as one of a series documenting the year-to-year improvements in our system of higher education. We hope that it is only a prelude to even greater accomplishments in the future.

With that hope in mind, we respectfully submit this report.

T. Edward Hollander, Chancellor
Department of Higher Education



Thomas H. Gassert, Esq., Chairman
Board of Higher Education

December 1986

THE FOUNDATIONS OF EXCELLENCE

INTRODUCTION

The Board and Department of Higher Education foster excellence in New Jersey's system of colleges and universities through both new and continuing programs. Even before the Governor's challenge intensified this commitment to quality, competitive funding mechanisms were stimulating and rewarding excellence. In addition, various initiatives in faculty development, student academic quality, and curricular innovation help sustain excellence throughout the system. Echoing the major emerging theme in higher education nationally – to strengthen undergraduate education – most of the undertakings emphasize improving instructional quality, introducing computers throughout the curriculum and bringing technological literacy to all students, and reexamining the fundamental assumptions of college curricula.

FUNDING TO REWARD EXCELLENCE

In his January 1985 annual message, Governor Kean challenged our colleges and universities to build in New Jersey one of the nation's preeminent systems of higher education, saying: "Taking up the challenge will mean setting goals that are clear and high. It means a willingness to dare greatly . . . Above all, it means a commitment to the highest standards." The challenge demands of the colleges concrete plans for excellence – grounded in existing strengths and commitments – and it provides them with both incentives and resources to reach their goals. This past year marked the initiation of ambitious programs to meet the Governor's challenge, and its extension to all public collegiate sectors. 1985-86 marked also the third year of systemwide competition for grants under the various Department grant programs and the unprecedented competition for funds from the Jobs, Science and Technology Bond Act.

The Challenge to Rutgers, The State University

An $8.7 million appropriation in FY 1986 supported the Governor's challenge to Rutgers. During the year, the university appointed senior faculty in history, computer-aided industrial productivity, microbiology, fiberoptics materials, and biotechnology, thereby broadening its base of "world-class" scholars in these fields. Moreover, the university attracted $62 million in external research support, a 30% increase over the previous year. The Henry Rutgers Research Fellowship program enabled the university to compete successfully with the nation's leading universities in recruiting and developing promising junior faculty. Furthermore, graduate programs now attract outstanding students from the most prominent undergraduate institutions in the nation. The James Dickson Carr Minority Scholarship Program, for undergraduates, enjoyed notable success in its first year in enrolling 81 academically talented minority students. Finally, the Fund for Distinction provides corporate and private donations and student tuition to construct academic and student life facilities.

The Challenge to New Jersey Institute of Technology

New Jersey Institute of Technology (NJIT) made significant progress in the first year of its response to the Governor's challenge, funded at $4.3 million in FY 1986. Recruitment of senior faculty accelerated with new appointments of a Dean of Engineering, Chairmen of Computer and Information Sciences and of Mathematics, a Director of the recently approved Computer-Integrated Manufacturing (CIM) Center, a Director of the Center for Hazardous and Toxic Substance Research, and a director of the center's biological and chemical division. These distinguished faculty in turn will attract others. In addition, the institute filled faculty chairs in computer science, biotechnology, and microelectronics and appointed 12 junior faculty in manufacturing-related fields. Graduate enrollment increased from 16% to 19% of total enrollment, moving NJIT toward its goal of 25% by 1990. Microcomputers for every incoming freshman in fall 1985 and two new 50-station networked computer laboratories furthered a plan for developing a computer-intensive campus environment. Finally, NJIT improved the academic profile of its entering students while maintaining its strong record of access for minority students and service to Newark's public school students.

The Challenge to State Colleges

The state colleges likewise were challenged to chart paths to distinction by capitalizing on their strengths and by formulating mission-

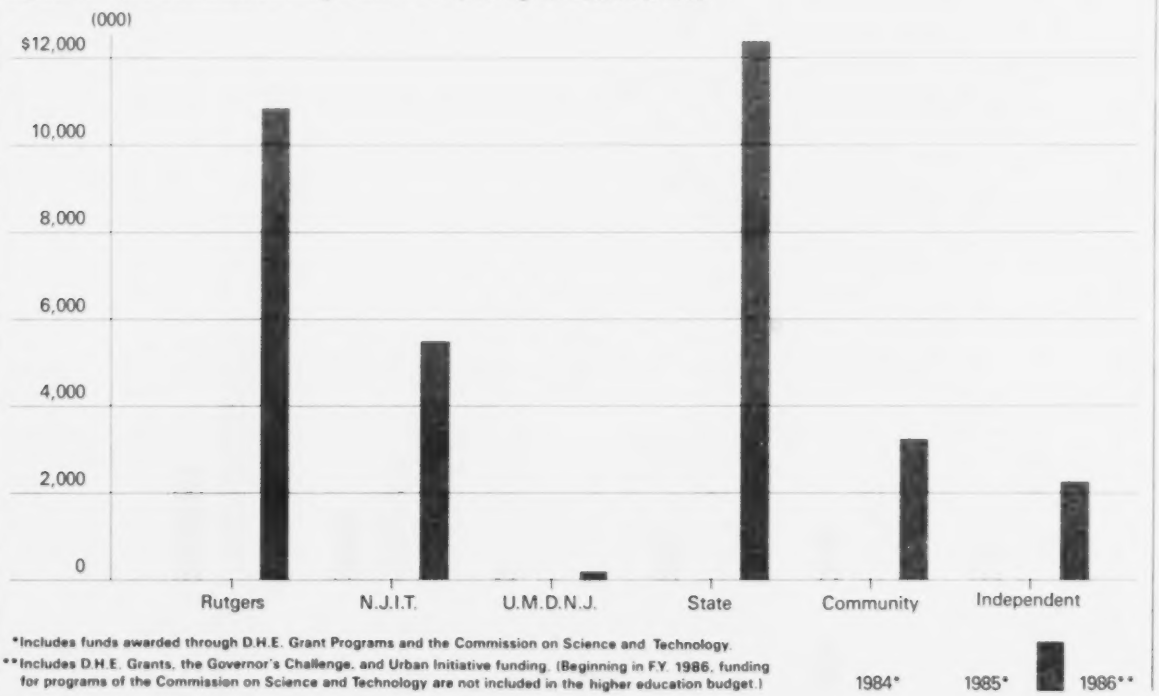
centered plans for curricular and instructional quality. The colleges competed for $10 million in challenge funding, submitting individual three-year plans for excellence. A panel of eminent out-of-state experts reviewed the plans in summer of 1985 and recommended grants to Jersey City State College ($5.7 million) and to Kean College ($4.0 million), for comprehensive plans that met the challenge. The panel also cited for merit four colleges' excellence plans and encouraged the remaining three to develop theirs further.

Jersey City's excellence plan calls for its transformation to a cooperative education-based institution, where all academic programs – including the liberal arts and sciences – will include applied learning, and all students will have the opportunity for a paid work experience while pursuing their degrees. The college advanced the plan in 1985-86 by preparing faculty to supervise students in field placements and to participate in an extensive planned revision of the curriculum. In addition, faculty were trained to offer a required two-credit work orientation course. Other benchmarks were surpassed in 1985-86 when numbers of new job placements and funds for cooperative education scholarships exceeded goals.

Kean College furthered the "computers-across-the-curriculum" component of its plan through training faculty and staff in the use of microcomputers. The assessment component moved forward with the unanimous endorsement by the faculty senate and approval by the college's board of trustees of principles and guidelines for a comprehensive program to assess student learning and development. The college also progressed in the other components of its plan – to develop a general education core curriculum and to increase enrollment of black students.

The first year's implementation was reviewed by a distinguished oversight panel (see Appendix B) which concluded that through his challenge the Governor had "provided distinguished leadership which . . . has the potential to reshape higher education in New Jersey, and to show the way for the rest of the country." The panel, moreover, hailed the Chancellor's decision to limit funding to just the two colleges, saying that these two grants " . . . have the potential to transform the institutions involved, advance higher education in New Jersey, and have national impact."

Figure 1. Special Initiative Funding to New Jersey Collegiate Sectors ($000)



*Includes funds awarded through D.H.E. Grant Programs and the Commission on Science and Technology.

**Includes D.H.E. Grants, the Governor's Challenge, and Urban Initiative funding. (Beginning in F.Y. 1986, funding for programs of the Commission on Science and Technology are not included in the higher education budget.)

Extending the Governor's Challenge

Governor Kean in his FY 1987 budget message renewed the challenge to the state colleges and extended it to the University of Medicine and Dentistry of New Jersey (UMDNJ) and to the community colleges.

Following the oversight panel's review of the first year of the state college challenge, an $8 million appropriation for FY 1987 carried it into a second round of competition. The same team of consultants that reviewed the FY 1986 proposals concluded that the proposals of four more state colleges – Ramapo College, Montclair State College, Thomas A. Edison State College, and Trenton State College – met the high standards of the Governor's challenge. The FY 1987 appropriation does not fund entirely the four colleges' plans; additional support will be sought in FY 1988 and FY 1989 so that each of these proposals can be completed as approved by the Board of Higher Education.

UMDNJ has been challenged to join the top 25 academic health centers in the nation. A $4.8 million appropriation will support a major initiative to promote excellence in teaching, research, and patient care. The community colleges were challenged to become among the best of their kind in the nation – "to develop and implement innovative programs that would foster educational excellence." A $3.5 million appropriation will be awarded competitively for proposals in the areas of minority student recruitment and retention (including basic skills remediation), technology education (including linkages with business and industry), and cooperative programs with secondary schools. Thirteen colleges are competing for grants; the other six have requested planning grants to enable them to compete in the next round if the program is continued. As with the state college challenge grants, an oversight panel will guide a review of the proposals by a team of expert consultants who will recommend grants for the best proposals.

Departmental Grant Programs

The Department's grant programs, designed to foster academic excellence in all disciplines, were instituted in 1983–84 with three competitive grant programs. Having grown to eight, the programs now include three in science and technology and three in the humanities. The seventh is to improve the quality of the undergraduate collegiate experience for students. The eighth program, originally a special project of the Department, serves learning disabled students. All stress undergraduate education.

The programs distributed approximately $12 million in 1985–86 to institutions in all sectors of New Jersey higher education (a level of funding equivalent to the income from a $125 million endowment). This brings to $27.5 million the three-year total since their inception. FY 1986 funds supported 260 projects, slightly more than half (52%) at public senior institutions, about one-fifth (21%) at community colleges, and roughly one-quarter (27%) at independent colleges. Winning projects were culled from nearly 900 preliminary proposals totalling $60 million. (See Table 2 in Appendix A.)

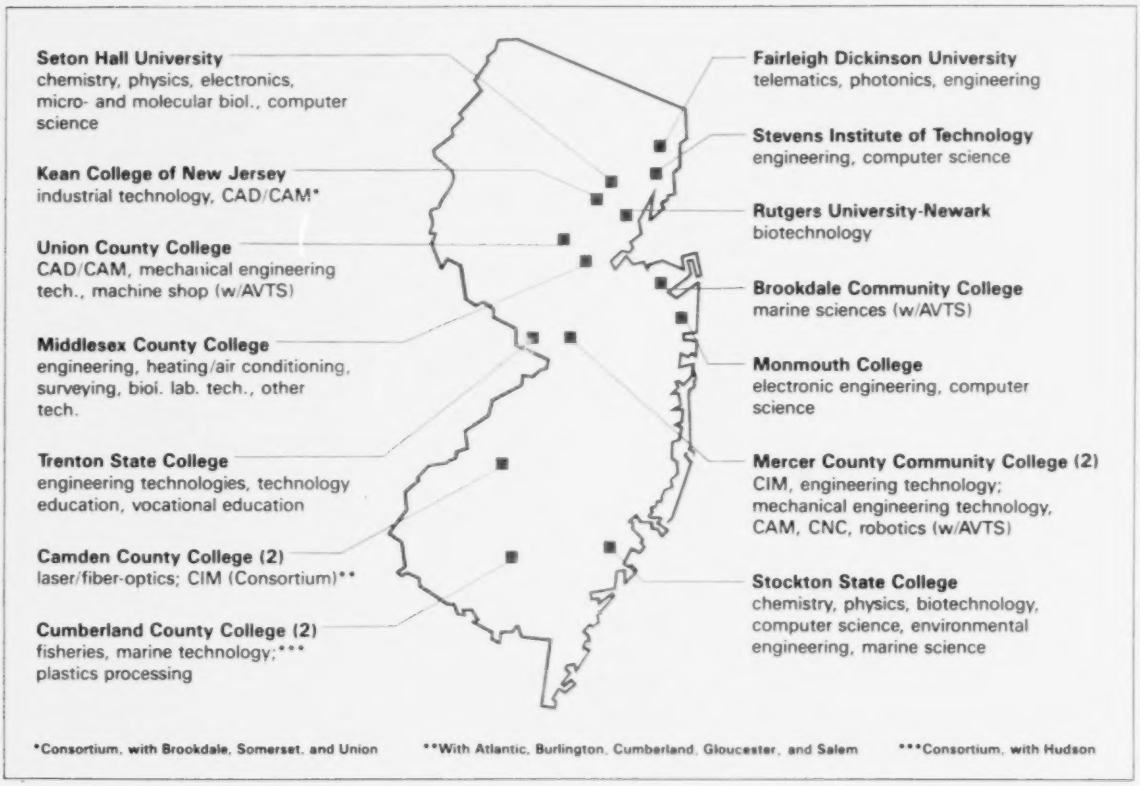
To ensure objectivity in awarding the grants, panels of out-of-state consultants – selected for their expertise and experience in higher education institutions similar to those in New Jersey – reviewed the colleges' proposals. Funded proposals in FY 1986 included such diverse projects as "The Garden State Immigration History Project," "Introduction to Urban Engineering," "Collegiate Pre-Technical Program for Hispanic Students of Limited English Proficiency," "Strengthening International Education – Faculty Workshops on Emerging Global Issues," "Promoting Excellence Through Writing Across the Curriculum in Area Schools and Colleges," and "Computer-Assisted Design – Solids Modeling."

The Department's grant programs also sponsored a variety of special projects, such as a feasibility study for an intercampus telecommunications network. The network will make voice, data, and video communications among all the institutions and with the Department more efficient and cost effective, and provide the environment for cooperative high technology ventures among industry, academe, and government. Another special grant supported the "Business/Humanities Project" to strengthen the relationship between career development and collegiate programs. In addition, seminars and workshops to promote technological literacy were sponsored for faculty from all sectors of higher education.

Jobs, Science and Technology Bond Act

In November 1984 New Jersey voters approved the $90 million Jobs, Science and Technology Bond Act, for capital projects to strengthen New Jersey institutions of higher education in two areas of high technology development,

Figure 2. Statewide Distribution of Projects Recommended for Funding Under the Jobs, Science and Technology Bond Act


Seton Hall University
chemistry, physics, electronics, micro- and molecular biol., computer science
Kean College of New Jersey
industrial technology, CAD/CAM*
Union County College
CAD/CAM, mechanical engineering tech., machine shop (w/AVTS)
Middlesex County College
engineering, heating/air conditioning, surveying, biol. lab. tech., other tech.
Trenton State College
engineering technologies, technology education, vocational education
Camden County College (2)
laser/fiber-optics; CIM (Consortium)**
Cumberland County College (2)
fisheries, marine technology;*** plastics processing
Fairleigh Dickinson University
telematics, photonics, engineering
Stevens Institute of Technology
engineering, computer science
Rutgers University-Newark
biotechnology
Brookdale Community College
marine sciences (w/AVTS)
Monmouth College
electronic engineering, computer science
Mercer County Community College (2)
CIM, engineering technology; mechanical engineering technology, CAM, CNC, robotics (w/AVTS)
Stockton State College
chemistry, physics, biotechnology, computer science, environmental engineering, marine science
*Consortium, with Brookdale, Somerset, and Union
**With Atlantic, Burlington, Cumberland, Gloucester, and Salem
***Consortium, with Hudson

research and education/training. The goals of the Bond Act are to create a network of advanced technology centers for research in fields in which New Jersey has strength or potential, and to improve undergraduate occupational and professional degree programs in scientific, technical, and engineering-related fields. The Act provides $57 million for the research centers, administered by the Commission on Science and Technology, and $33 million for educational programs, administered by the Board of Higher Education.

The legislation designated $23 million of the educational portion for instructional programs, to be distributed competitively, and $10 million for specified capital projects. At least $7 million of the latter was for a Technology Education Center at Burlington County College and for the Southern New Jersey Computer-Integrated Manufacturing (CIM) Center at Camden County College. The rest of the $10 million was earmarked by the Department for a northern/central CIM center at NJIT. (See discussion of the CIM centers on page 5.)

The $23 million instructional portion of the Act funds new or improved facilities and equipment to promote enhanced undergraduate education and job training/retraining in science and technology. In response to a competitive request for proposals (RFP) issued by the Department in October 1985, 32 institutions submitted 41 proposals totalling $88 million. A distinguished oversight panel (see Appendix B) guided a rigorous review that included technical consultants' evaluations of various aspects of the proposals, as well as assessment of all the proposals from a statewide perspective.

The 17 highest rated proposals were approved for further development by the Board of Higher Education at its July 1986 meeting. These projects, listed in Table 23 in Appendix A, will result in a statewide network of quality educational programs (Figure 2). The oversight panel noted, in addition, that other proposals also warranted Bond Act support but could not be recommended due to insufficient funds.

EXCELLENCE THROUGHOUT THE INSTITUTION

Faculty

Faculties are the cornerstone of excellence in higher education. Governor Kean recognized this in his chairman's address at the July 1985 annual meeting of the Education Commission of the States when he called on state leaders "to create, sustain, and defend the conditions that great teaching demands."

In New Jersey, the Department is collaborating with the New Jersey Association of Colleges and Universities to design a faculty development plan based on what faculty think they need. The first joint effort, a series of faculty dialogues in spring 1986 on undergraduate education, brought together members of the Board of Higher Education, senior-level Department administrators, and outstanding faculty from around the state. Over the course of three colloquia, 140 faculty from 36 institutions participated.

A consensus emerged that faculty need to understand better both the process of learning and the art and science of teaching. The Department has proposed an Institute on Collegiate Teaching and Learning and a comprehensive statewide faculty development program to address this need.

Initiatives already in place provide faculty with the opportunities for innovation and involvement so crucial to excellence. For example, the Department's various categorical grant programs, Governor Kean's Challenge Program, and the Jobs, Science and Technology Bond Act competition all help stimulate faculty creativity and productivity. In addition, faculty development is promoted by curriculum development efforts – for example, three 9-day workshops, sponsored by the Department, where teams of New Jersey college faculty gathered to formulate plans for teaching technological concepts to the general student bodies at their institutions. The Department's three technological literacy seminars last year (for faculty in sociology, music education, and philosophy) and its four annual, discipline-specific, curriculum enhancement conferences for state college faculty also are important faculty development efforts.

Students

Policies of the Board of Higher Education support the colleges' efforts to recruit and retain an increasingly academically talented student body. The academic index, for example, a recommendation of the Board's statewide plan, measures the academic ability of regularly admitted freshmen at the public senior colleges and universities. The index combines average scholastic aptitude test (SAT) scores and high-school class ranks. At most institutions, it has risen steadily since the policy was instituted (see Table 6 in Appendix A). The fall 1986 freshman class is expected to demonstrate even higher levels of achievement.

The basic skills program (see page 10) improves the academic proficiencies of educationally underprepared students so that they can pursue collegiate study. By thus equipping students to undertake college work, the overall quality of the student body is raised. Further, differential funding of remediation programs at the county colleges (page 19) provides additional resources for these colleges to support such programs, particularly important for promoting student quality in a sector where open access is so central to institutional mission.

In 1984 Governor Kean called for a state merit scholarship program to recognize outstanding New Jersey secondary-school graduates and to provide a financial incentive for them to attend college in state. Legislation that year established the New Jersey Distinguished Scholars Program, which carries a renewable $1,000 annual scholarship for these students if they choose a New Jersey college or university.

The first class of 700 distinguished scholars enrolled as freshmen in fall 1985, after passing through a rigorous selection process that begins with identification by secondary schools of candidates who ranked in the top 10% of their junior-year classes. From these, the Department of Higher Education nominates students who rank first or second in their classes, or achieve combined SAT scores of at least 1200, or are the first or second choice of their secondary schools.

For the next class of distinguished scholars, New Jersey secondary schools in 1985–86 identified 6,770 students for consideration, and the Department nominated 2,820. Eight hundred ten will enroll in fall 1986.

Curricula

During 1985–86 the Board of Higher Education approved plans for instructional programs and facilities for a southern and a northern/central computer-integrated manufacturing (CIM) center. The centers will meet current and future needs for CIM technicians in New Jersey. They exemplify not only an important curricular concept, but also a new level of cooperation among higher education institutions and between the institutions and the respective regions' business and industrial communities.

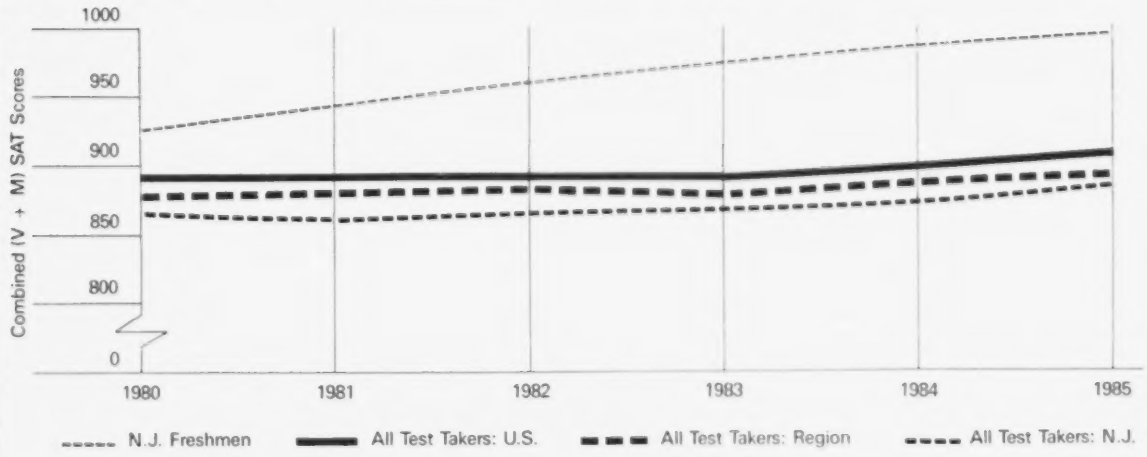
The Southern New Jersey CIM Center, located on the campus of Camden County College, brings together six county colleges and NJIT to offer undergraduate instruction in the integration of data processing, digital communication, computer graphics, and manufacturing processes. The Northern/Central CIM Center, located at NJIT, is comprised of 12 county colleges with NJIT as the lead institution. In addition to undergraduate instruction, it stresses graduate-level instruction and research in electronics, computer science, hydraulics, pneumatics and mechanical systems, as well as in robotics, microcomputers, and computer-aided drafting and manufacturing.

In light of accelerated development activities in the southern part of the state, the Department conducted during 1985–86 a feasibility study of engineering education needs there. The study examined demographic and labor market changes, and the availability of faculty and other resources to support both new and existing programs.

The study identified a shortage of qualified engineering faculty, expected to worsen during the next decade, as the major obstacle both to improving the quality and to increasing the number of programs. In the case of undergraduate training, however, student demand appears to have levelled and may decline. As a result, the study recommended no new undergraduate programs, suggesting instead that colleges concentrate resources on existing programs. The study further recommended a departmental task force to develop engineering program articulation agreements between county colleges and Rutgers and NJIT.

With respect to graduate programs, on the other hand, the study judged these a very high priority. Anticipated growth in high technology industries associated with the Federal Aeronautics Administration Technical Center in Pomona (Atlantic County) will create substantial staff needs for advanced technical education in the region. The study recommended, therefore, part-time master's programs in computer science and electrical engineering. (NJIT and Stevens Institute of Technology are discussing a possible spring 1987 start for these programs.) The study recommended also a feasibility study of instructional television networking, to provide maximum flexibility with limited resources.

Figure 3. N.J. Public Senior Colleges and Universities: Comparison of SAT Scores of Test Takers and Enrolled Freshmen*



*Regularly admitted, full-time first-time freshmen, fall of each year.

EQUITY / ACCESS

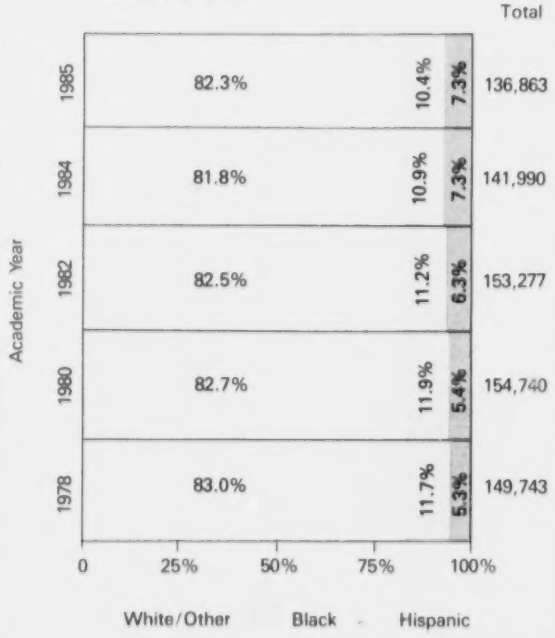
INTRODUCTION

An extensive array of new initiatives and programs of support help realize the commitment of the Board and Department of Higher Education to equal educational opportunity. At the heart of their efforts is a belief that true opportunity means access to educational *excellence* for all New Jersey citizens.

MINORITY ENROLLMENT INITIATIVES

A critical challenge to higher education's commitment to access for minority students has been a serious enrollment decline among black students (exceeding the overall contraction in higher education enrollments). The number of black full-time undergraduates, for example, fell nearly 16% between 1980 and 1984 (in contrast to an 8% decline for all full-time undergraduates),

Figure 4. Black, Hispanic, and White/Other Full-Time Undergraduate Enrollment in N.J. Colleges and Universities



and another 8% in fall 1985, compared with a 4% total decline. The number of Hispanics decreased for the first time in 1985, after growing steadily since 1978. Several initiatives were undertaken in 1985–86 to address this crisis.

Minority Student Symposium

In January 1986 the Department sponsored, with the support of several statewide organizations, a two-day invitational symposium. Four hundred campus (faculty and senior-level administration) and community representatives participated as task forces in workshops and discussion groups. They developed suggestions for a broad-based program of both statewide and institutional initiatives in four areas: college pool growth, recruitment, retention, and linguistic/cultural considerations. Symposium proceedings are scheduled for publication in winter 1986–87.

BHE Policy Initiatives

Drawing on the recommendations of the minority student symposium and other Departmental research, the Board of Higher Education at its March 1986 meeting proposed a systemwide initiative to help stem the continuing decline in black enrollments and sudden downturn among Hispanics.

First, the Board required each public college and university to submit a summary of its activities to increase minority enrollments, in fall 1986 and fall 1987, outlining both recruitment and retention efforts. These reports were used by the budget committee of the Board in considering institutional budget requests for FY 1988. Further, the institutions must submit (early in 1987) comprehensive strategic plans to address declining minority enrollments over the long term. In addition, the Board asked each public college to establish a permanent working group to formulate the plan and a special committee of its board of trustees to monitor the college's progress in implementing it. Annual reports to the Department on this will be submitted.

The Board included the independent institutions by inviting from the Association of Independent Colleges and Universities of New Jersey a strategic plan for the sector. Finally, the Board of Higher Education established its own special committee on minority enrollments to examine policies and programs for improving minority recruitment and retention and to make appropriate recommendations to the Board.

Pre-College Academic Programs

In 1985–86 New Jersey colleges and universities served thousands of urban and minority students in pre-college academic projects. Colleges have operated such programs for several years, augmenting college funds with federal grants and private foundation donations. In 1985–86, the Department of Higher Education selected a set of programs in urban areas for support, allocating $1.1 million in two categories: four large-scale efforts in the state's three major urban areas – Newark, Trenton, and Camden – and nine smaller projects in Newark and five other cities.

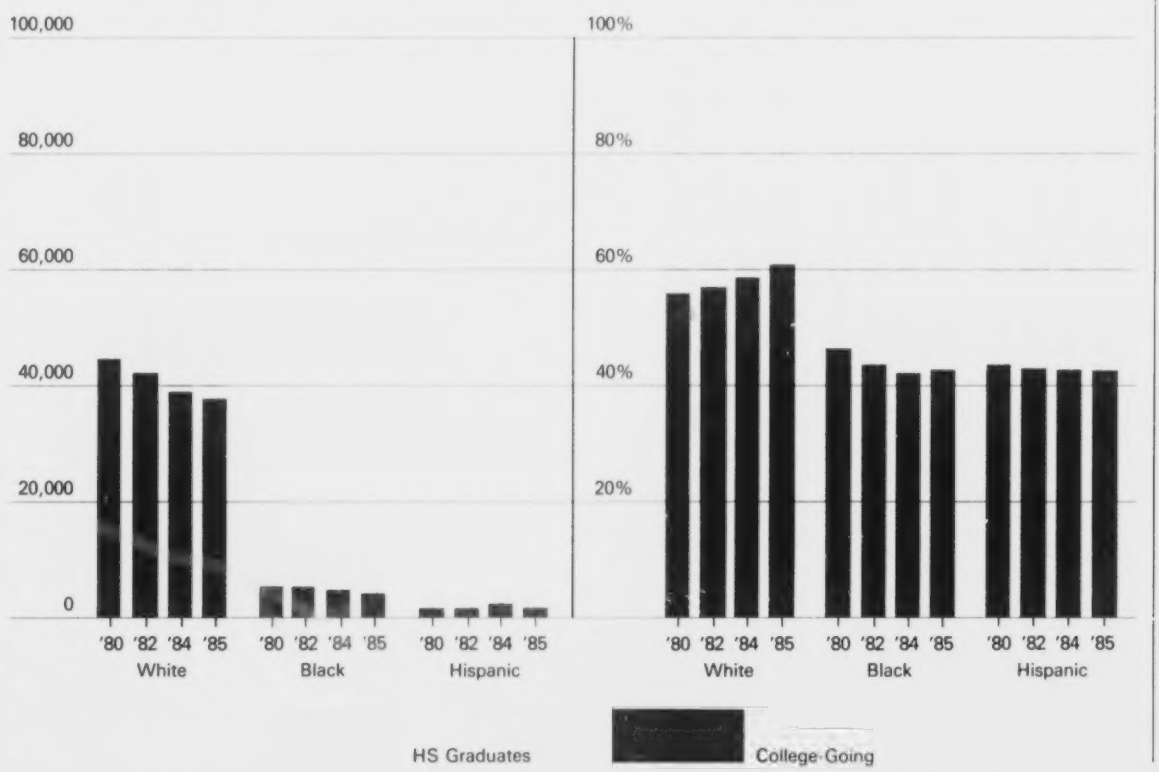
Common features of all the programs are intensive summer experiences followed by contact with students throughout the academic year and monitoring of their progress throughout high school and into college. In addition to academic instruction in various disciplines, most projects include counseling, tutoring, and career awareness activities. Two offer on-campus summer residencies; many involve students' teachers and parents to reinforce campus efforts.

These programs foster academic achievement and strengthen disadvantaged students' college aspirations, through basic skills and other academic instruction and through contact with minority faculty. The programs also motivate and prepare the students for high-technology careers, where minorities have been underrepresented, by encouraging continued math and science study.

EOF Transcript Analysis

The Department analyzed student transcripts from selected institutions to determine the causes of the changing racial/ethnic profile of the EOF program – a major avenue of access for black and Hispanic minorities, whose proportion in the program declined from 74% to 69% between fall 1981 and fall 1985. (This decline reflects a significant loss of black students that was only partially offset by an increase among Hispanics,

Figure 5. College-Going Rates of White, Black, and Hispanic N.J. Public High School Graduates



primarily non-Puerto Ricans.)

The data suggest that differential retention, primarily, caused the compositional shift. Specifically, black and Puerto Rican retention declined while that of whites and other Hispanics (Cubans, Dominicans, etc.) increased. In fact, other Hispanics had the highest retention rate of all the groups. These findings countered the speculation that changes in recruitment were the major cause of the shift. (For example, among black EOF students, attrition accounted for 60% of the overall decline, decreased freshman enrollments, 40%.)

Other findings include a high correlation between retention and basic skills proficiencies at entry – higher than with any other variable studied. Summer program attendance, moreover, increases proficiency levels – and accordingly, retention rates as well. Although higher credit ratios and cumulative grade point averages also correlate with higher retention, some students, nevertheless, drop out in 'good' academic standing. Similarly, SAT scores do not predict the retention of EOF students.

The findings have generated additional questions, and follow-up research will study institutional characteristics that affect EOF student retention.

EOF Probation

Fall 1985 was the target year when the state's public colleges and universities were to have achieved the goal of enrolling at least 10% of their New Jersey freshmen through the EOF program. (Independent institutions were encouraged to pursue the same goal.) In spring 1986, the EOF Board of Directors placed on probation 15 public colleges that had failed to meet the 10% goal. (See Tables 16 and 17 in Appendix A.) Probationary status drew reduced FY 1987 program budgets for these institutions (that is, smaller increases than would have occurred ordinarily). In addition, these colleges, as well as seven independent institutions with less than 10% EOF freshmen, were required to submit detailed plans for complying with this important access policy. The EOF Board has reviewed and accepted the plans of all but two that are seeking exemptions from the 10% policy because of demographic and economic factors in their recruitment areas. EOF is studying these colleges' requests for EOF freshman goals that reflect more accurately the populations they serve.

BASIC SKILLS

The Assessment Program

The New Jersey College Basic Skills Assessment Program identifies and assists the educationally underprepared student. (All public institutions participate in the program; 11 independent institutions participate voluntarily.) The program is intended to reduce the probability of the "open door" becoming a "revolving door" for many students, thus depriving them of the chance to succeed.

In 1978, well before the recent national studies and reports documenting a decline in academic abilities among students, the Department began assessing annually the basic skills proficiencies of New Jersey college freshmen. The statewide test results have shown that many of these 50,000 students lack college-level skills in reading, writing, and elementary mathematics. The percentages have remained relatively constant since the program's inception – in 1985, 31% required remediation in verbal skills and 60% in elementary algebra.

The most recent report to the Board of Higher Education on the effectiveness of remedial programs at public colleges and universities shows that skills-deficient students who complete an appropriate remedial course sequence have just as great a chance of success in college as those who did not need remediation. A new site visitation program will afford the opportunity to examine closely individual colleges' remedial curricula. The Basic Skills Council (see Appendix B) plans to gather and disseminate information on practices that seem to constitute "model" programs.

Pre-College Remedial Programs (Academic Skills Centers)

Three intensive academic skills centers address severe basic skills deficiencies, as measured by the NJCBSPT. The centers provide "pre-remedial" instruction to prepare students, most of whom are adults, for the regular basic skills remediation program at the county college.

The original center and model for the other two is located at Essex County College. Reproducing the model at Camden County College and Mercer County Community College in 1986–87 was recommended by the Board of Higher Education as part of its program to reverse the minority enrollment decline.

AFFIRMATIVE ACTION

Doctoral Program for Minorities

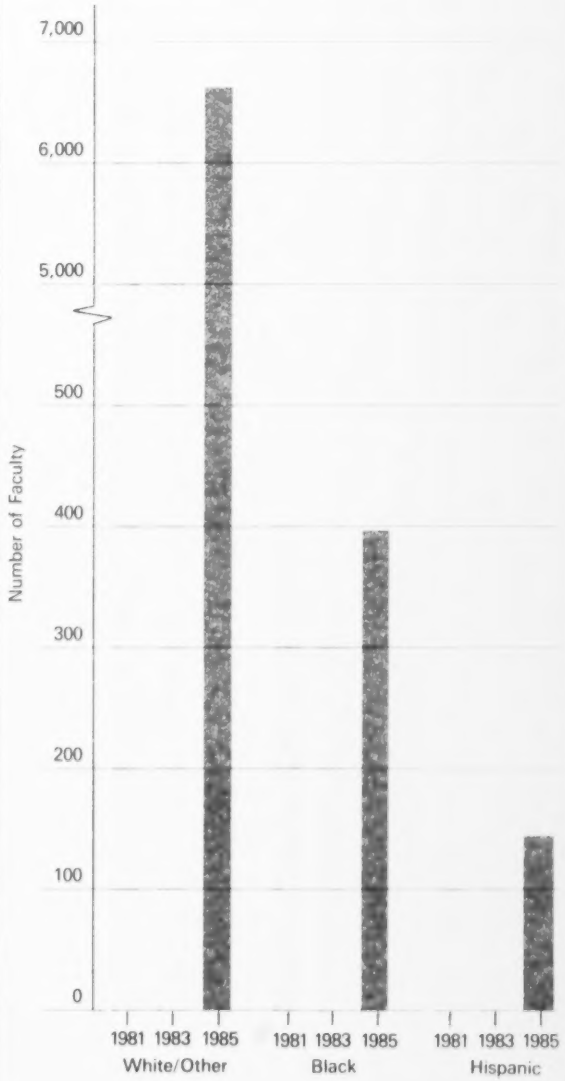
The Minority Academic Career (MAC) Program, which began operating in 1985–86, seeks to increase the presence of underrepresented minorities on New Jersey college and university faculties by enlarging the pool of qualified minority candidates for faculty positions. A key feature of the program is sustained financial support during full-time doctoral study, through stipends and through opportunities for interest-free loans and loan redemption service.

MAC was modeled after the Rutgers Minority Advancement Program (MAP), a prestigious doctoral fellowship for minority faculty at the state colleges seeking academic careers in the sciences. For maximum effectiveness, MAC extends the original MAP concept to include other disciplines and all eight doctoral institutions (Drew, Fairleigh Dickinson, Princeton, and Seton Hall Universities, in addition to Rutgers; New Jersey and Stevens Institutes of Technology; and UMDNJ). Further, non-teaching professionals as well as faculty, from any college in the state, are eligible MAC candidates, as are recent bachelor's or master's graduates not currently affiliated with a New Jersey college or university.

Representatives from the doctoral (host) institutions discussed during 1985–86 possible networking and recruitment activities. Further, the Department launched an intensive recruitment effort to attract MAC candidates, including a national publicity campaign aimed at both institutions and agencies of higher education. Over 1,200 inquiries on the program were received from potential candidates, mostly from the eastern states and Puerto Rico. In addition, legislators from California, Connecticut, Florida, Michigan, and Tennessee inquired about MAC as a possible model for programs in their own states.

The first MAC fellows were granted awards in spring 1986. (The program serves also students enrolled in the original Rutgers MAP.) Fourteen fellows, eight new and six continuing from MAP, participated. Their mean age is 32.5. Nine are black; five, Hispanic. Three completed their predoctoral training in New Jersey, two in Puerto Rico, and nine in six other states and South America. Two fellows are being sponsored by state colleges.

Figure 6. Full-Time Faculty at New Jersey Public Colleges and Universities, by Ethnicity



STUDENT ASSISTANCE

Student Assistance Programs

The Department of Higher Education and its policy boards (the Student Assistance Board, the Educational Opportunity Fund Board of Directors, and the New Jersey Higher Education

Assistance Authority) administer a full range of financial aid programs to assist New Jersey students. Most of the State's assistance is based on financial need (such as Tuition Aid and Educational Opportunity Fund Grants), some on merit (such as Garden State Graduate Fellowships and Distinguished Scholarships), and some on both (Garden State Scholarships). During 1985–86 these programs awarded 69,000 financial aid grants totalling $62 million to students attending New Jersey colleges and universities. In addition, 101,000 loans totalling $250 million were guaranteed. (See Tables 4 and 5 in Appendix A.)

Tuition Aid Grant (TAG) Funding/Tuition Policy

The TAG program coalesces the student assistance and tuition policies of the Board of Higher Education. The Board's tuition policy posits an appropriate relationship between tuition charges at public institutions and the institutions' educational costs – students, through tuition, contribute a "fair share" of approximately 30%. (See Table 3 in Appendix A). Rising costs have resulted, of course, in increased tuition.

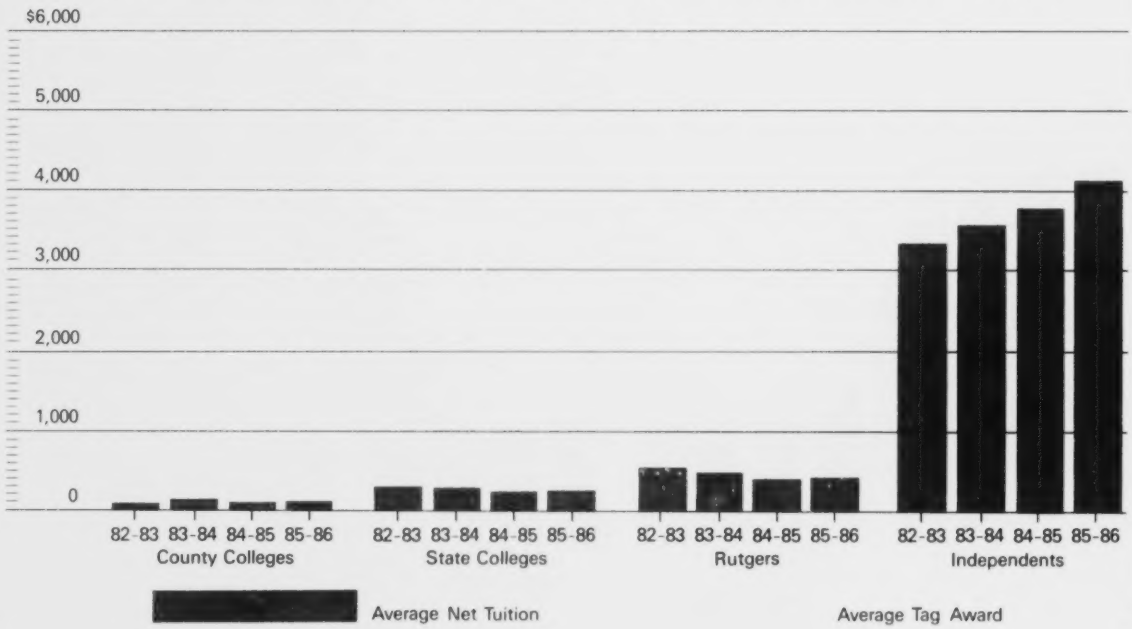
The TAG program's award schedule accommodates rising, and varying, tuition charges and provides grants based upon both the tuition at each student's college and the student's ability to pay. The neediest students at public colleges and universities receive full-tuition awards. (At independent institutions in 1985–86, the neediest received grants of $2,300, or about 40% of the average charge in the sector.)

EOF Initiatives

The EOF program provides a wide range of support for high-risk students and has developed a number of special initiatives for recruiting and retaining these students. Among these are special summer programs, high school articulation programs, and targeted instructional efforts. The Mathematics Immersion Program, the Mathematics and Computer Science Institute, and "Polishing Touch" are examples.

The Mathematics Immersion Program (MIP), cosponsored with Stevens Institute of Technology, encourages students to pursue and remain in math/science and technology majors. After the summer 1985 MIP, most of the 21 participants could enroll in calculus courses at their respective institutions. In addition, all 21 declared majors in mathematics-related disciplines; seven received awards for academic achievement and three received scholarships.

Figure 7. Average Total Tuition Charges and Average Net Tuition Paid by Tuition Aid Grant Recipients Since 1982–83



The Mathematics and Computer Science Institute at Trenton State College is a high school articulation program. Of the 17 high school seniors who attended the program last year, 13 enrolled in college in 1985–86, nine of them attending Trenton State College through the EOF program.

"Polishing Touch" is a special retention project at New Jersey Institute of Technology. It features EOF alumni as mentors providing guidance and support to EOF juniors and seniors.

Federal Programs

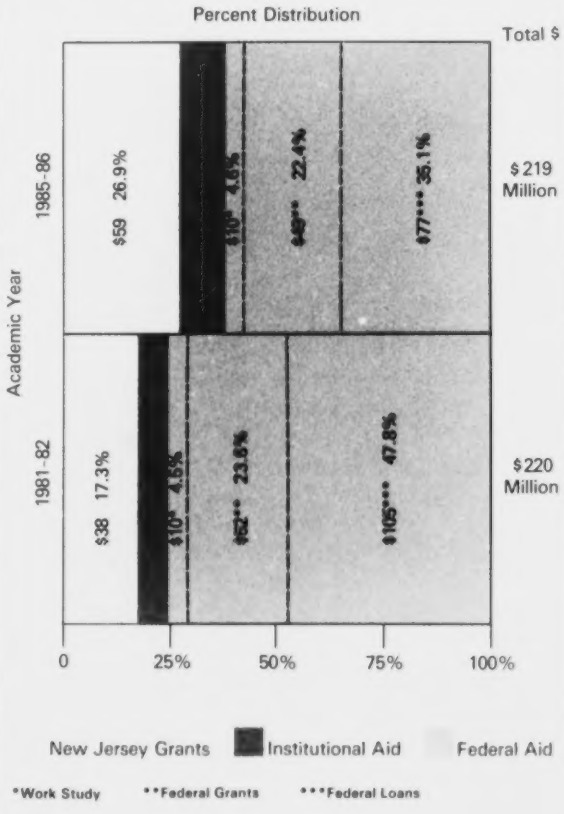
The New Jersey Higher Education Assistance Authority (NJHEAA) administers two federal educational loan programs, the Guaranteed Student Loans (GSL) and the PLUS loans, serving as the primary agency guaranteeing loans for New Jersey students. Because of recent changes in federal interstate banking practices, however, New Jersey schools and lenders now have the option of using "national" guarantors currently operating in many states.

The GSL volume guaranteed by NJHEAA dropped by 16% ($44 million), from $274 million in 1984–85 to $230 million in 1985–86. This decline suggests that the new guarantee agencies are curtailing New Jersey's educational loan activity. It is not known, however, just how much of the decline reflects a decrease in borrowing rather than a shift to alternative guarantors.

Federally funded programs (such as Pell Grants, College Work-Study, and the loan programs) are the major source of financial aid to New Jersey students. Since 1980–81, however, federal support has not paralleled increases in educational costs, while state and institutional support grew every year. From 1981–82 to 1985–86 total financial aid to full-time undergraduates at New Jersey colleges and universities remained at about $220 million. Of this amount, the State's contribution increased (from 17% to 27%) as did the institutions' (from 7% to 11%), while the federal share dropped (from 76% to 62%).

Although the state and institutional increases offset the federal reductions, total educational expenses (tuition, fees, room and board, etc.) continued to rise, and as a result, the responsibility for financing college has shifted to students and their families, whose share of total expenses has increased from 60% to over 70%. Failure to fully fund the Pell Grant Program in 1986–87 will continue this trend.

Figure 8. Financial Aid Funds Available to New Jersey Full-Time Undergraduates



Student Aid Committee

In response to the continuing decline in federal financial aid funds and the development of a federal policy which seeks to shift a larger proportion of educational costs onto the states and students and their families, the Board of Higher Education established in the spring of 1986 a committee to study New Jersey's future student assistance needs and to recommend appropriate initiatives. The committee sponsored a conference in May to discuss major issues and proposals with representatives of the financial aid community. Among the proposals under consideration are tuition savings plans, a state loan program, a state work-study program, state funds for part-time students, aid to single parents, and an urban scholars program. The committee will present final recommendations to the Board of Higher Education in spring 1987.

SPECIAL ISSUES

INTRODUCTION

Several major undertakings of the past year either encompass several issues in New Jersey higher education, address particular issues of major potential import, or focus on major policy changes affecting individual institutions. These activities reflect the leadership of the Board and Department in anticipating future needs and in maintaining the system's viability and its responsiveness to society.

EVALUATING THE OUTCOMES OF HIGHER EDUCATION

In June 1985 the Board of Higher Education created the College Outcomes Evaluation Program (COEP) to demonstrate to decision makers and to the public the contributions of higher education to the people of New Jersey, and to foster excellence in the state's higher education system. The primary concern of the program is overall institutional effectiveness, rather than individual achievement of students, faculty, and staff.

A 24-member advisory committee (see Appendix B), representing all sectors of higher education as well as industry, government, and elementary/secondary education, was appointed to formulate the specifics of the program. Further, because the participation of all sectors of the higher education audience is vital to the program's success, the committee's work includes activities promoting the exchange of ideas and information.

The committee formed separate subcommittees to explore, debate, and make recommendations in four areas: student learning; student development/post-collegiate activities; research, scholarship, and creative expression; and community/society outcomes.

The student learning subcommittee is considering what knowledge/skill areas should be assessed and how, and the appropriate locus of responsibility for the assessment. The student development subcommittee is exploring possible outcomes of a college education not easily measured by traditional academic assessment. Identified for further study are economic measures, such as first job earnings; certification, such as performance on licensing exams; and retention, such as graduation rates in particular academic programs. The research subcommittee interprets its charge broadly, to include all activities of faculty and staff (such as teaching, publications, inventions, etc.) and to develop a model linking the activities to desirable outcomes. The community subcommittee must determine how to assess the impact of a college or university on the community it serves. It is examining measures of educational and cultural service, as well as economic impacts, and is identifying the various community audiences.

To encourage communication and participation, the committee is sponsoring in October 1986 a statewide conference on college outcomes assessment. Other efforts to keep the higher education community and the public informed and to solicit their ideas will include reports, newspaper articles, meetings, and campus visits.

Based on the subcommittees' findings, the advisory committee will report to the Board by the end of the 1986–87 academic year with an initial set of recommendations.

MEDICAL EDUCATION POLICY INITIATIVES

Physician Licensure Standards

Responding to growing public concern about the education of some physicians, in October 1985 the Board of Higher Education adopted a paper on emerging issues in quality assurance regarding physicians seeking licensure in New Jersey. As a result of the Board's action, a joint committee with the New Jersey State Board of Medical Examiners (BME) was established to examine thoroughly the existing statutes and regulations governing educational and licensure standards for physicians. The joint committee's final report (due in winter 1986–87) will recommend measures to ensure that the educational backgrounds of licensure candidates reflect the requirements of contemporary medical practice.

Graduate Medical Education

Graduate medical education, or residency training, is a critical element in preparing physician graduates for the independent

practice of medicine. In September 1984 the Board of Higher Education adopted *A Policy Prospectus for Graduate Medical Education in New Jersey.* This report established a broad framework for planning the future of graduate medical education in the state. To develop specific recommendations, the Department's Advisory Graduate Medical Education Council (AGMEC) in fall 1985 empaneled two broadly constituted task forces. One addressed issues of scope and quality and the other, of financing. AGMEC and the Board of Higher Education will consider the task forces' joint report in winter 1986–87. It calls for major quality enhancements to New Jersey's graduate medical education system, by improving individual residency programs, choosing residency candidates more selectively, and monitoring closely overall system size. The report also recommends further study of additional, alternative means of financing high-quality residency programs.

South Jersey Medical Education Program

In 1975 the New Jersey Legislature mandated medical education programs in southern New Jersey. The Board of Higher Education then established the South Jersey Medical Education Program (SJMEP), to include both osteopathic (D.O.) and allopathic (M.D.) training, using shared facilities and joint educational efforts among existing schools of UMDNJ. A new School of Osteopathic Medicine (SOM) was created and a branch clinical campus of Rutgers (now Robert Wood Johnson) Medical School in Piscataway was established in Camden.

Under Board policy, established in 1975 and reaffirmed in 1979, osteopathic medical students received basic science instruction jointly with allopathic students in Piscataway. According to UMDNJ this structure created numerous difficulties in curriculum design, overcrowding in Piscataway, and problems in faculty and student morale. Consequently, in 1984 the university proposed a unified (basic and clinical sciences at the same location) SOM in Stratford, site of SOM's core affiliate hospital.

In accordance with a 1979 agreement between the university and the Board of Higher Education, a panel of external consultants reviewed SJMEP and considered the merits of the university's SOM unification proposal. The panel's January 1985 report recommended the creation of a four-year osteopathic school in Stratford, and greater integration of the Camden clinical and overall Piscataway programs.

During 1985–86 a committee of the Board of Higher Education considered both the consultants' report and a staff analysis of options for SJMEP. In July 1986 the Board adopted its committee's recommendation – a unified SOM in Stratford – noting the university's and SOM's high-quality educational and research programs and the university's plans to strengthen further the osteopathic program. The Board also recommended fuller integration of the Robert Wood Johnson Medical School programs.

SECTOR STUDY COMMISSIONS

In January 1986 Governor Kean, noting "unevenness" in the county college sector, called upon the Board of Higher Education to examine the county community colleges and to frame sound recommendations for the future direction of the sector. A panel of seven nationally recognized community college experts (see Appendix B) convenes in September to review the accomplishments of the state's system of 17 county colleges and two commissions, and to examine major educational issues affecting their health and vitality.

The Commission will propose specific courses of action in three areas: mission, service, and society; financial, human, and capital resources; and success and access. In all its deliberations, the panel will consider the various changes (economic, social, etc.) in the colleges' local environments, will relate the concepts of access and excellence, and will consider new funding mechanisms and governance structures that their recommendations may require. The study represents a significant event in the 20-year history of New Jersey's system of community colleges, which now serves more than one-third of the students enrolled in higher education in New Jersey.

In January 1986 the Association of Independent Colleges and Universities in New Jersey (AICUNJ) established the Commission on the Future of Independent Higher Education in New Jersey. Although the commission is not state-sponsored, the Department has applauded the efforts of the commission, which is expected to issue its report early in 1987.

SYSTEM STATUS REPORT

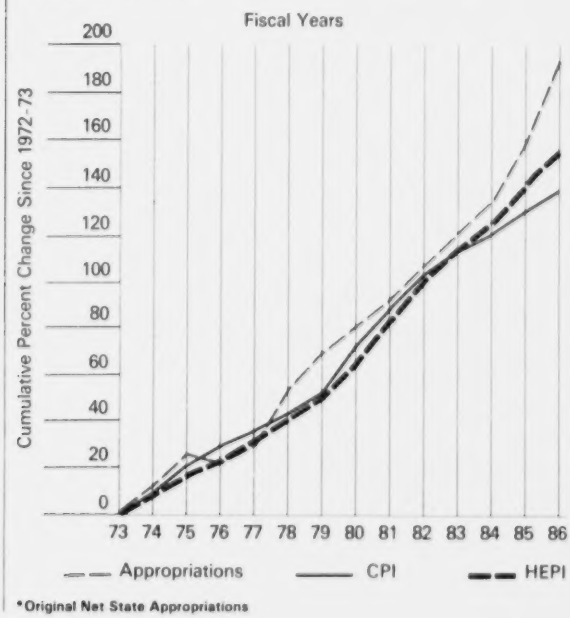
INTRODUCTION

This chapter highlights topics associated with the statutory responsibilities of the Board and Department in planning, finance, and governance. Fulfilling these responsibilities complements the Board's initiatives in the areas of access, excellence, and other special issues. (Various descriptive statistics appear in Appendix A.)

SIZE OF THE SYSTEM

New Jersey's 57 colleges and universities enrolled 298,000 students in fall 1985, down 2% from the year before, continuing the trend that began in fall 1983. (To the extent that "traditional" students, that is, recent high school graduates, remain the predominant college cohort, this trend will continue into the 1990s when an upturn reflecting increased birthrates of the early 1980s will occur.) State, community, and independent colleges declined while the public universities registered modest increases, as has been the case since 1983. Degrees conferred have been declining, but not as fast as enrollments, and the system continues to produce approximately 44,000 graduates each year. The number of full-time faculty remains just under 10,000, providing a higher instructional ratio – and a richer educational experience for students. (See Appendix A for data on enrollments, degrees, and faculty.)

Figure 9. Comparison of Changes in the Higher Education Price Index (HEPI), the Consumer Price Index (CPI), and State* and County Appropriations for N.J. Public Institutions of Higher Education



*Original Net State Appropriations

BUDGET/FINANCE

Funding Trends

Between FY 1973 and FY 1986 the original net state appropriation for higher education increased 181%, from $257 million to $723 million. Because this growth rate exceeds that of the Higher Education Price Index (HEPI) over the same period, the system experienced a "real" increase of about 11%. (From FY 1982 through 1984, "real" *decreases* obtained when the constant dollar state appropriations were slightly below the FY 1973 level.) A $792 million net state appropriation in FY 1987 will continue this trend toward significantly improved levels of state support. If the rate of inflation for higher education does not change, this 200% growth will mean a 16% "real dollar" increase since FY 1973.

Approximately 90% of the nearly $723 million FY 1986 appropriation supported institutional operations, student assistance programs, and health professions education. About one-half of the remaining 10% funded debt service; the rest financed capital projects, operations of the Board and the Department, and special programs. (See Table 1 in Appendix A.) The total for institutional operations ($547 million) included $23.0 million for the Governor's challenge, the largest and major new initiative in the FY 1986 budget. In addition, the Board of Higher Education reserved $2.0 million of the operating support to the county college sector for certain types of special programs (see page 19.) The $1.9 million Urban Initiative, one of the most important special programs, funded pre-collegiate academic and remedial centers (see pages 9 and 10) and the University Heights Development project in Newark. With a $9.9 million appropriation, the DHE grants were the largest special program in the budget. (In addition, FY 1986 marked the

second year that $2.0 million in funds were available from the New Jersey Higher Education Assistance Authority for the Fund for the Improvement of Collegiate Education grant program.)

The portions of the budget devoted to institutional operations aim to limit salary growth while increasing non-salary expenditures in order to preserve the educational quality and long-term vitality of the institutions. Funding for student assistance programs also reflects the commitment of the Governor and the Legislature to investing in higher education – by providing students from diverse backgrounds with the financial means to benefit from such an investment. Especially important was the State's commitment to TAG and EOF in FY 1986, which totalled $45.1 million and $17.3 million, respectively.

Capital Needs

The preservation of their physical plants is vital to ensuring the educational quality of our institutions and to protecting the State's $2 billion capital investment. Deferral of capital project funding jeopardizes safety and hastens deterioration of the system's capital assets.

Deferred maintenance and normal aging have created a growing backlog of projects – currently more than $130 million at the public senior institutions – and an urgent need for adequate funding. State appropriations for capital projects for renewal and replacement are meeting only a fraction of that need – although they have risen significantly in recent years. (A total of $28.1 million was appropriated between FY 1984 and FY 1986. For FY 1987, another $12 million has been voted.) The colleges drew an additional $7 million in state funds in FY 1986, for fire code safety ($4 million) and asbestos removal ($3 million). In FY 1987, however, the Department will compete with other state agencies for a share of $10 million ($5.3 million and $4.7 million for fire safety and asbestos projects, respectively) to address a $30 million need sectorwide for such projects.

For the county colleges, legislation enacted in 1985 increased from $80 million to $160 million the value of projects at the county colleges for which the state will finance 50% of the debt service. A significant portion of these projects will be for renewal and replacement, fulfilling the Board's commitment to preserving and restoring the system's physical plant. In FY 1986, thirteen colleges activated projects totalling $11 million. Another $6 million has been allocated in FY 1987 for projects at 12 colleges.

Figure 10. Growth of Salary Expenditures per FTE Student: N.J.I.T., Rutgers University, State Colleges

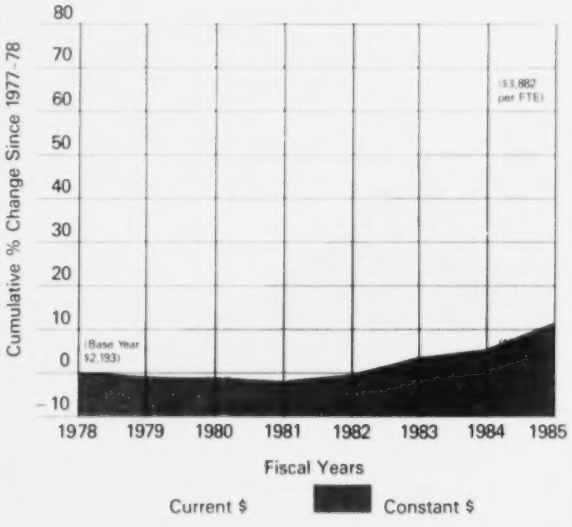


Figure 11. Growth of Non-Salary Expenditures per FTE Student: N.J.I.T., Rutgers University, State Colleges

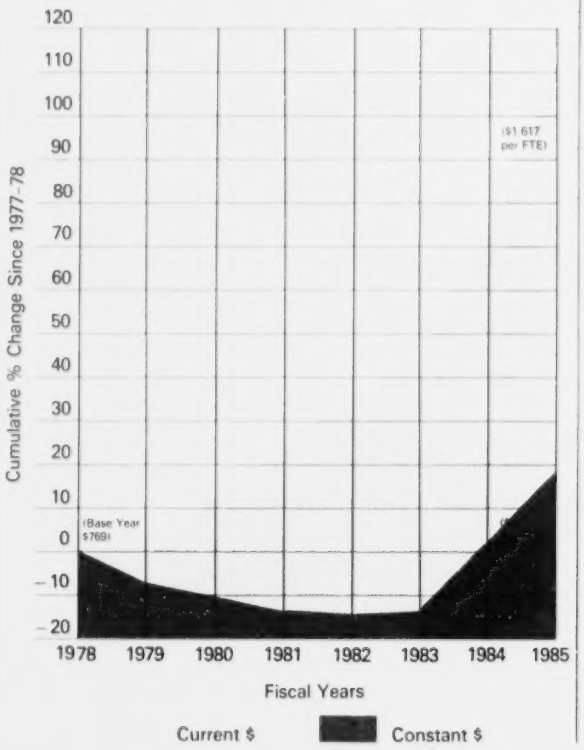
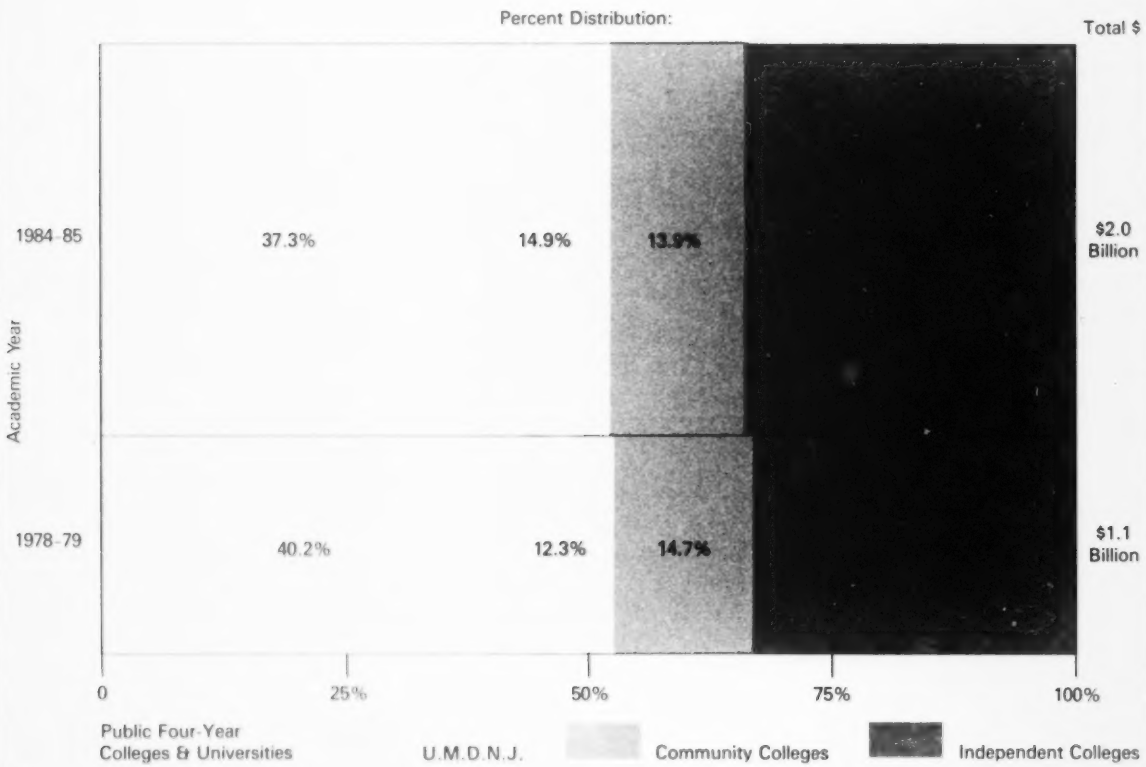


Figure 12. Total Expenditures by New Jersey Higher Education



FUNDING POLICIES AND FORMULAS

In the past, enrollment "quantity," primarily, determined operating budgets and support for institutions of higher education in New Jersey. Gradually, the basis for funding has shifted toward "quality" and performance measures. For example, in FY 1984, incentive-based budgeting replaced enrollment-driven formula funding for public senior colleges and universities, redirecting resources to non-salary areas to preserve educational quality and the system's long-term vitality. Further, although portions of the higher education budget – for community and independent colleges, for example – continue to be allocated by formula (as mandated by statute), these formulas have become more sophisticated, linking funding to several factors besides capitation.

Public Senior Institutions

The FY 1986 operating budgets of New Jersey's public senior colleges and universities were determined, for the first time, by providing each institution with a continuation or "base" budget and additional funding for program priorities. The "above-base" increases were targeted for specific initiatives, such as furthering the institutions' plans for excellence or expanding service for underrepresented populations. In addition, the DHE Grant Programs (see page 4), for example, along with the Governor's challenges (pages 2 to 4) provide substantial support above direct operating aid, reward quality in the distribution of funds, and promote both excellence and fiscal viability.

Community Colleges

Legislation enacted in 1981 shifted overall state funding for the community college sector from a capitation model (fixed dollar amounts

per student) to one based primarily on the colleges' educational and general operating costs. This funding to the county colleges increased by $23.4 million over the past three years (from FY 1984 to FY 1987), contributing significantly to their fiscal health.

Also as a result of the legislation, state appropriations now are allocated to the colleges under a formula that includes two types of support, differential and categorical. Differential funding recognizes differences in program costs, particularly in the areas of technological and health education and basic skills remediation, and provides varying support per credit hour of enrollment for these types of courses. Categorical funding provides a formula-allocated base of institutional support to promote continuing program development.

Two types of special categorical funding were introduced in FY 1986. The first earmarked $2.0 million to develop and enhance programs in minority student recruitment and retention, technical education (including linkages with business and industry), and remediation. For FY 1987, this type of funding will be continued in the form of the Governor's challenge to the community colleges (see page 4). The second new type of categorical funding will provide resources for special regional programs of statewide significance – for example, the CIM centers, for the high costs of operating and equipping the facilities.

Independent Institutions

The Independent College and University Assistance Act (ICUAA) of July 1979 revised funding policy for the state's 16 independent institutions with a public mission. The Act linked state support to that in the state college sector by a formula which considers both enrollment in the independent colleges and per-student state aid to the state colleges. Funds are allocated to each college based primarily upon its enrollment of New Jersey residents and of state financial aid recipients.

The ICUAA recognizes the contribution of New Jersey's independent colleges and universities and reflects the Board's commitment to a diverse system of higher education. Although the Board and the Department had intended to phase in full funding of the Aid Act over three years, fiscal constraints have kept funding below this level – 84% in FY 1981, 79% in 1982, 74% in 1983, and 72% in 1984. FY 1985 funding (82%) reversed this downward trend, and FY 1986 continued the movement towards full funding, with a $16.1 million appropriation representing 91%.

The independent institutions receive substantial amounts of other state aid, in addition to ICUAA funding. Total direct aid in FY 1986 was $24.8 million, comprised of funding under Aid to Schools of Professional Nursing, DHE grant programs, scholarly chairs, and EOF Article IV (support services), as well as ICUAA, and support for the Fairleigh Dickinson University School of Dentistry. In addition to this direct aid, the colleges received $20 million in indirect aid from the state, in the form of student assistance (financial aid under TAG, GSS, and similar programs). The total of nearly $45 million accounted for 8% of the educational and general (E&G) expenditures in the sector. Percentages for individual institutions ranged from 0.4% to 36%.

STATE COLLEGE AUTONOMY

On July 9, 1986, Governor Kean signed into law a new governance approach that places the responsibility for managing the nine state colleges in the hands of the colleges' boards of trustees. The quest for the same fiscal and operational autonomy enjoyed by New Jersey's other public senior institutions was initiated in 1982 when the Board of Higher Education established the Commission on the Future of the State Colleges. Based on a 1984 Board of Higher Education plan, autonomy legislation was introduced in 1985. The initially passed version, however, drew the Governor's conditional veto, because of amendments that ran counter to the concept of autonomy and undermined the original intent of the legislation. The strong support of the Governor and the courage of numerous legislators, however, finally overcame the opposition.

In accordance with the statute, the Board of Higher Education is required to oversee an orderly transition to autonomy that must be fully accomplished by June 30, 1989. At its July 1986 meeting, the Board transferred authority to the colleges in several areas, approved a transition schedule, and established a transition team comprised of Department and college representatives. In accordance with the Board's schedule, authority for fiscal and operational matters will be transferred to the state colleges in three phases beginning in fall 1986.

APPENDIX A

Table 1

ORIGINAL† NET STATE APPROPRIATIONS NEW JERSEY HIGHER EDUCATION

	F.Y. 1973		F.Y. 1986		F.Y. 1987	
	($000)	% Dist.	($000)	% Dist.	($000)	% Dist.
Rutgers University	64,630	28.0%	180,426[c]	27.9%	201,561[c]	28.1%
N.J.I.T.	7,449	3.2%	26,428[c]	4.1%	30,614[c]	4.3%
U.M.D.N.J.	34,828	15.1%	101,278	15.6%	118,829[c]	16.6%
State Colleges	52,926	23.0%	169,467[c]	26.2%	185,132[c]	25.9%
Community Colleges*	29,988	13.0%	75,863	11.7%	81,863[c]	11.4%
Independents**	7,000	3.0%	20,536	3.2%	22,687	3.2%
Student Assistance	32,006	13.9%	70,024	10.8%	71,271	10.0%
Health Professions	1,801	.8%	3,393	.5%	3,502	.5%
(SUBTOTAL) (= 100%)	**(230,628)**	**(89.8%)**	**(647,415)**	**(89.6%)**	**(715,459)**	**(90.4%)**
Debt Service	22,506	8.8%	44,268	6.1%	42,896	5.4%
Capital:						
Renewal and Replacement	500	.2%	12,000	1.7%	12,000	1.5%
(Special Projects)	—	—	(5,700)	—	—	—
Central Administration	1,122	.4%	3,218	.4%	3,513	.4%
Special Projects***	2,000	.8%	4,065	.6%	5,241	.7%
D.H.E. Grant Programs:						
Science and Technology	—	—	6,792	.9%	6,792	.9%
Humanities	—	—	2,500	.3%	2,500	.3%
For. Languages/Int'l. Ed.	—	—	500	.1%	500	.1%
Learning Disabled	—	—	100	.0%	750	.1%
The Urban Initiative	—	—	1,900	.3%	1,900	.2%
Grand Total†	**$256,756**	**100.0%**	**$722,758**	**100.0%**	**$791,551**	**100.0%**

*Operating support only; includes $300,000 in F.Y. 1986 and F.Y. 1987 for the Southern CIM Center. Community colleges receive additional state aid for debt service which is included here in that total. Also, since F.Y. 1982, the colleges have received aid for pension fund payments previously paid from a central state account. These figures are *not* included in the table.

**Includes (since 1977) aid to Fairleigh Dickinson University School of Dentistry.

***Includes funding for scholarly chairs established by the Legislature. Includes also special projects such as the Basic Skills Assessment Program, the Governor's School, the Center for Information Age Technology (CIAT), State College Automation, etc.

†Includes supplemental appropriations. Not included are fringe benefits, which are paid from a central state account, and salary increases, which take effect subsequent to the passage of the original appropriation. Reflects *net* support, i.e., less state college revenues. Also excluded are appropriations for special capital projects, shown in parentheses ( ) in the table.

[c] Includes Governor's Challenge funding.

Table 2

F.Y. 1986 DEPARTMENT OF HIGHER EDUCATION GRANT PROGRAMS*

	Tech./ Eng'g. Educ.	Computers in Curric.	Math/ Sci. Tch'g.	Humanities	For. Lang./ Int'l.	Learn. Disabld.	FICE**	Total
	($000)	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Rutgers University	140	669	36	465	147	49	526	2,032
N.J.I.T.	219	175	45	30	–	–	30	499
U.M.D.N.J.	–	–	–	–	–	–	58	58
State Colleges	476	289	38	678	110	52	700	2,343
Community Colleges	1,332	585	75	169	65	55	316	2,597
Independents	237	688	100	465	102	34	553	2,179
SUBTOTAL†	$ 2,404	$ 2,406	$ 294	$ 1,807	$ 424	$ 190	$ 2,183	$ 9,708
Central Projects/ Administration	566	531	1,078***	503	91	45	84	2,898
TOTAL	**$2,970**	**$2,937**	**$1,372**	**$2,310**	**$ 515**	**$ 235**	**$2,267**	**$12,606****
(Original Appropriation)	(2,873)	(2,919)	(1,000)	(2,500)	(500)	(100)	(2,000)	(11,892)

*The grant programs are: Technical/Engineering Education (which includes a Cooperative Education sub-grant); Computers in Curricula; Mathematics, Science, and Computer Science Teaching Improvement; New Jersey Humanities; New Jersey Foreign Language; New Jersey International Education; Postsecondary Learning Disabled Student Services; and the Fund for the Improvement of Collegiate Education (FICE).

**New Jersey Higher Education Assistance Authority reserves support the FICE program.

***Includes $339,345 for loan redemption for the faculty retraining program in computer science.

****Includes carry forward funds from FY 1985.

†A total of 260 projects were funded, including 54 at the community colleges, 62 at the state colleges, 71 at the independents, 62 at Rutgers, 10 at N.J.I.T., and 1 at U.M.D.N.J.

Table 3

TUITION AS A PERCENT OF EDUCATIONAL COSTS IN NEW JERSEY PUBLIC INSTITUTIONAL SECTORS, BY STUDENT TYPE

	Policy	1979-80	1983-84	1984-85	1985-86	1986-87
Rutgers University*						
Undergrad: Res.	30%	24.0%	29.6%	28.2%	29.2%	28.0%
Undergrad: Non-Res.	45%	48.1%	59.2%	56.4%	58.5%	55.9%
Graduate: Res.	45%	34.2%	42.1%	40.2%	41.6%	39.8%
Graduate: Non-Res.	45%	49.4%	60.7%	57.8%	60.0%	57.4%
N.J.I.T.						
Undergrad: Res.	30%	20.7%	28.4%	29.3%	29.9%	26.1%
Undergrad: Non-Res.	45%	41.3%	56.8%	58.6%	59.9%	52.3%
Graduate: Res.	45%	29.4%	37.8%	41.4%	42.4%	37.0%
Graduate: Non-Res.	45%	42.5%	54.4%	59.7%	61.0%	53.3%
U.M.D.N.J.**						
Undergrad: Res.	30%	20.3%	26.3%	27.0%	25.0%	24.9%
State Colleges						
Undergrad: Res.	30%	29.1%	30.1%	30.4%	27.9%	26.2%
Undergrad: Non-Res.	45%	57.0%	48.8%	48.3%	42.9%	39.3%
Graduate: Res.	45%	43.7%	45.1%	45.6%	41.8%	39.3%
Graduate: Non-Res.	45%	62.7%	59.2%	59.0%	53.1%	49.2%
Community Colleges***						
County Residents	30%	30.7%	30.0%	30.0%	27.2%	26.3%

*Beginning in 1983-84, Rutgers established differential tuition rates for the undergraduate professional colleges and, at the graduate level, for the M.B.A. programs. (Differential rates reflect higher costs associated with these programs.) Displayed here are the percentages for tuition at the undergraduate arts and sciences colleges and at the graduate schools except as noted above.

**For purposes of the tuition policy, U.M.D.N.J.'s state resident medical and dental students are considered undergraduates; i.e., tuition is to be 30% of costs. Tuition for non-state residents in the medical and dental programs is 31.3% above the charge for state residents. Tuition for graduate students (School of Biomedical Sciences) is the same as at Rutgers. Tuition for students in the School of Health-Related Professions varies according to academic level and length of program.

***The maximum allowable tuition, as established by the Board of Higher Education, for a full-time in-county student is used in these calculations. The actual tuition at individual colleges may be lower.

Table 4

NEW JERSEY STATE STUDENT GRANT PROGRAMS

	# of Student Awards		Amount of Awards ($000)	
	1984-85	1985-86	1984-85	1985-86
Tuition Aid Grant (TAG)	45,846	44,707	$41,155	$45,893
Educational Opportunity Fund (EOF)	12,406	12,053	7,169	7,031
EOF Summer Program	2,697	3,451	2,796	3,252
Garden State Scholarship	8,125	7,451	3,544	3,381
Distinguished Scholars Program	–	699	–	685
Garden State Graduate Fellowship	73	70	435	420
EOF-Graduate Program	224	192	635	528
Public Tuition Benefits and POW/MIA	30	29	45	51
Veterans Tuition Credit	–	626	–	164
Vietnam Veterans Aid	–	139	–	97
TOTAL ALL PROGRAMS*	**69,401**	**69,417**	**$55,779**	**$61,502**

*Students may receive awards from more than one program. For example, most EOF and GSS students also receive a Tuition Aid Grant.

PROGRAM CHANGES IN 1985-86:

TAG maximum awards were raised to current year average tuition in the public sectors and to $2,300 in the independent sector.

The Distinguished Scholars Program was inaugurated.

Veterans Tuition Credit program was funded.

Vietnam Veterans Aid program was established.

Table 5

GUARANTEED STUDENT LOAN PROGRAMS

	# of Loans		Amount of Loans ($000)	
	1984-85	1985-86	1984-85	1985-86
Guaranteed Student Loans	112,837	94,321	$274,037	$230,242
PLUS Loans	6,938	6,893	18,812	18,968
Public Loans (State-funded)	478	136	1,372	401
Computer Science Faculty Development*	44	56	218	154
TOTAL LOAN VOLUME BY PROGRAM	**120,297**	**101,406**	**$294,439**	**$249,765**
N.J. Colleges and Universities	43,624	37,733	$ 98,540	$ 85,334
N.J. Proprietary Schools	24,890	18,354	57,927	43,275
Out-of-State Institutions	51,783	45,319	137,972	121,156
TOTAL LOAN VOLUME BY SECTOR	**120,297**	**101,406**	**$294,439**	**$249,765**

*State-funded loan redemption program.

Table 6

ACADEMIC INDEX DATA FOR FULL-TIME FIRST-TIME FRESHMEN AT NEW JERSEY PUBLIC SENIOR INSTITUTIONS

	BAI*	1981	1982	1983	1984	1985
N.J.I.T.	100.0	101.9	102.3	103.8	104.2	104.2
Rutgers University	100.0	100.0	102.8	103.7	103.2	102.8
Glassboro	100.0	101.6	103.7	104.7	105.2	105.8
Jersey City	100.0	102.9	104.6	104.0	101.2	105.8
Kean	100.0	100.5	103.7	103.7	103.7	103.2
Montclair	100.0	100.0	101.0	102.0	102.0	101.0
Ramapo	100.0	102.6	101.0	104.2	103.1	100.5
Stockton	100.0	103.7	103.7	104.7	104.2	105.2
Trenton	100.0	102.0	102.4	104.9	102.4	104.9
Wm. Paterson	100.0	101.6	103.8	104.3	104.8	104.8

*Average of AIs for fall 1978, 1979, and 1980. Each institution's actual BAI was set equal to 100 for comparison with its AI in subsequent years.

Table 7

SUMMARY OF STATEWIDE BASIC SKILLS TESTING PROGRAM AS REPORTED BY N.J. PUBLIC COLLEGES AND UNIVERSITIES

	Reading		Writing		Computation		Elementary Algebra	
	1984	1985	1984	1985	1984	1985	1984	1985
FULL-TIME STUDENTS								
# tested	28,028	28,007	28,028	28,007	28,028	28,007	28,028	28,007
# requiring remediation	10,321	10,331	8,321	9,040	9,116	8,313	12,177	10,651
% of total tested	37%	37%	32%	32%	35%	30%	43%	38%
# enrolled in remediation	9,625	9,548	7,935	8,555	8,167	7,363	5,791	5,169
% of total requiring remediation	93%	92%	95%	95%	90%	89%	48%	49%
PART-TIME STUDENTS								
# tested	8,446	7,894	8,446	7,894	8,446	7,894	8,446	7,894
# requiring remediation	3,315	3,513	2,434	2,773	3,876	3,793	4,494	4,104
% of total tested	39%	45%	32%	35%	47%	48%	53%	52%
# enrolled in remediation	2,096	2,182	1,756	1,837	2,318	2,211	1,502	1,428
% of total requiring remediation	63%	62%	72%	66%	63%	58%	33%	35%

Table 8

NEW DEGREE PROGRAMS APPROVED BY THE NEW JERSEY BOARD OF HIGHER EDUCATION, BY COLLEGIATE SECTOR AND DEGREE LEVEL: 1985–86

	Associate	Bachelor's	Master's	Doctoral	Total
Rutgers University	–	–	1	–	1
N.J.I.T.	N.A.	–	–	–	–
U.M.D.N.J.	N.A.	N.A.	–	–	–
State Colleges	–	–	–	N.A.	–
Community Colleges	12	N.A.	N.A.	N.A.	12*
Independents/Proprietaries	–	3	1	–	4
TOTAL NEW PROGRAMS	**12**	**3**	**2**	**–**	**17**

N.A. – College(s) not authorized to grant degrees of this type.

*Includes the A.A.S. degree program in Computer-Integrated Manufacturing (CIM) offered by the Southern CIM Consortium at Camden County College. Other consortium members (Atlantic Community College; Burlington, Cumberland, and Gloucester County Colleges; and Salem Community College) offer the program jointly with Camden.

Not reflected in the counts: the discontinuance of three associate degree programs (at community colleges) and one bachelor's degree program (at a state college), and the authorization for two out-of-state institutions to offer coursework.

Table 9

TOTAL DEGREES CONFERRED IN NEW JERSEY COLLEGES AND UNIVERSITIES, BY TYPE OF DEGREE

	F. Y. 1977–78	F. Y. 1983–84	F. Y. 1984–85	% Change One-Year	% Change Seven-Year
Sub-Associate	1,059	820	783	–4.5	–26.1
Associate	10,675	10,386	10,126	–2.5	–5.1
Bachelor's	25,086	24,155	23,765	–1.6	–5.3
Master's	8,130	6,824	6,547	–4.1	–19.5
Doctorate	713	726	690	–5.0	–3.2
First-Professional*	1,364	1,703	1,743	2.3	27.8
TOTAL	**47,027**	**44,614**	**43,654**	**–2.2**	**–7.2**

*These are degrees in law, medicine, dentistry, and the theological professions.

Table 10

TOTAL DEGREES CONFERRED IN NEW JERSEY COLLEGES AND UNIVERSITIES, BY COLLEGIATE SECTOR

	F. Y. 1977-78	F. Y. 1983-84	F. Y. 1984-85	% Change One-Year	% Change Seven-Year
Rutgers University	8,719	8,626	8,702	.9	-.2
N.J.I.T.	897	1,048	1,150	9.7	28.2
U.M.D.N.J.	332	445	483	8.5	45.5
State Colleges	13,867	11,608	10,916	-6.0	-21.3
Community Colleges	10,243	10,115	10,004	-1.1	-2.3
Independents	12,969	12,772	12,399	-2.9	-4.4
TOTAL	**47,027**	**44,614**	**43,654**	**-2.2**	**-7.2**

Table 11

TOTAL DEGREES CONFERRED IN NEW JERSEY COLLEGES AND UNIVERSITIES, BY SEX AND BY ETHNICITY

	F. Y. 1977-78	F. Y. 1983-84	F. Y. 1984-85	% Change One-Year	% Change Seven-Year
Men	23,599	20,406	20,095	-1.5	-14.8
Women	23,428	24,208	23,559	-2.7	.6
Blacks	3,400	2,949	2,937	-.4	-13.6
Hispanics	1,149	1,599	1,623	1.5	41.3
Whites/Others	42,478	40,066	39,094	-2.4	-8.0
TOTAL	**47,027**	**44,614**	**43,654**	**-2.2**	**-7.2**

Table 12

TOTAL* HEADCOUNT ENROLLMENT IN NEW JERSEY COLLEGES AND UNIVERSITIES

	Fall 1978	Fall 1984	Fall 1985	% Change One-Year	% Change Seven-Year
Rutgers University	49,987	47,161	47,646	1.0	-4.7
N.J.I.T.	5,669	7,235	7,495	3.6	32.2
U.M.D.N.J.	1,440	2,093	2,114	1.0	46.8
State Colleges	85,925	76,109	73,670	-3.2	-14.3
Community Colleges	98,721	109,973	106,372	-3.3	7.8
Independents	65,469	61,953	60,358	-2.6	-7.8
GRAND TOTAL*	**307,211**	**304,524**	**297,655**	**-2.3**	**-3.1**
Public Total*	**241,742**	**242,571**	**237,297**	**-2.2**	**-1.8**
Undergraduate Total	**259,381**	**260,471**	**253,352**	**-2.7**	**-2.3**

*Includes both full- and part-time students, at both undergraduate and post-baccalaureate levels.

Table 13

TOTAL* HEADCOUNT ENROLLMENT IN NEW JERSEY COLLEGES AND UNIVERSITIES, BY SEX AND BY ETHNICITY

	Fall 1978		Fall 1984		Fall 1985	
	#	%	#	%	#	%
Men	148,837	48.4	140,161	46.0	136,678	45.9
Women	158,374	51.6	164,363	54.0	160,977	54.1
Blacks	31,409	10.2	28,616	9.4	27,346	9.2
Hispanics	11,342	3.7	16,914	5.6	16,833	5.7
Whites/Others	264,460	86.1	258,994	85.0	253,476	85.1
TOTAL	**307,211**	**100.0**	**304,524**	**100.0**	**297,655**	**100.0**

*Includes both full- and part-time students, at both undergraduate and post-baccalaureate levels.

Table 14a

BLACK FULL-TIME UNDERGRADUATES AS A PERCENT OF TOTAL FULL-TIME UNDERGRADUATE ENROLLMENT, BY SECTOR

	Fall 1978		Fall 1980		Fall 1984		Fall 1985	
	# of Blacks	% of Total	# of Blacks	% of Total	# of Blacks	% of Total	# of Blacks	% of Total
Rutgers University	3,202	11.3	3,474	12.5	2,815	10.2	2,675	9.6
N.J.I.T.	154	5.3	229	7.2	270	8.1	279	8.6
U.M.D.N.J. (SHRP)	46	44.2	59	52.2	32	50.8	32	53.3
State Colleges	4,507	10.2	4,145	9.5	3,804	9.8	3,669	9.9
Community Colleges	6,789	17.0	7,260	16.3	5,827	14.1	4,964	12.9
Independents	2,809	8.2	3,221	9.1	2,725	8.7	2,618	8.7
TOTAL	**17,507**	**11.7**	**18,388**	**11.9**	**15,473**	**10.9**	**14,237**	**10.4**

Table 14b

HISPANIC FULL-TIME UNDERGRADUATES AS A PERCENT OF TOTAL FULL-TIME UNDERGRADUATE ENROLLMENT, BY SECTOR

	Fall 1978		Fall 1980		Fall 1984		Fall 1985	
	# of Hisp.	% of Total	# of Hisp.	% of Total	# of Hisp.	% of Total	# of Hisp.	% of Total
Rutgers University	1,056	3.7	1,319	4.7	1,477	5.4	1,536	5.5
N.J.I.T.	141	4.8	196	6.2	315	9.9	346	10.7
U.M.D.N.J. (SHRP)	8	7.7	16	14.2	11	17.5	5	8.3
State Colleges	2,422	5.5	2,300	5.3	2,559	6.6	2,566	6.9
Community Colleges	2,227	5.6	3,029	6.8	4,430	10.8	4,133	10.8
Independents	1,238	3.6	1,558	4.4	1,615	5.2	1,453	4.9
TOTAL	**7,092**	**4.7**	**8,418**	**5.4**	**10,407**	**7.3**	**10,039**	**7.3**

Table 15a

BLACK FULL-TIME FIRST-TIME FRESHMEN AS A PERCENT OF TOTAL FULL-TIME FIRST-TIME FRESHMAN ENROLLMENT, BY SECTOR

	Fall 1978		Fall 1980		Fall 1984		Fall 1985	
	# of Blacks	% of Total	# of Blacks	% of Total	# of Blacks	% of Total	# of Blacks	% of Total
Rutgers University	974	14.0	991	14.4	557	9.6	555	9.0
N.J.I.T.	54	7.8	63	9.6	61	12.2	56	11.8
U.M.D.N.J. (SHRP)	42	54.5	36	62.1	12	75.0	19	61.3
State Colleges	1,091	11.3	830	9.1	857	11.5	827	11.7
Community Colleges	3,068	16.2	2,979	15.2	2,122	13.6	1,683	11.8
Independents	680	7.8	898	10.3	720	9.7	612	8.8
TOTAL	**5,909**	**13.1**	**5,797**	**12.9**	**4,329**	**11.7**	**3,752**	**10.7**

Table 15b

HISPANIC FULL-TIME FIRST-TIME FRESHMEN AS A PERCENT OF TOTAL FULL-TIME FIRST-TIME FRESHMAN ENROLLMENT, BY SECTOR

	Fall 1978		Fall 1980		Fall 1984		Fall 1985	
	# of Hisp.	% of Total	# of Hisp.	% of Total	# of Hisp.	% of Total	# of Hisp.	% of Total
Rutgers University	350	5.0	453	6.6	370	6.4	366	5.9
N.J.I.T.	50	7.3	52	8.0	79	15.7	68	14.3
U.M.D.N.J. (SHRP)	7	9.1	6	10.3	2	12.5	3	9.7
State Colleges	561	5.8	577	6.3	633	8.5	541	7.6
Community Colleges	1,007	5.3	1,278	6.5	1,824	11.7	1,518	10.6
Independents	323	3.7	468	5.4	431	5.8	359	5.1
TOTAL	**2,298**	**5.1**	**2,834**	**6.3**	**3,339**	**9.1**	**2,855**	**8.2**

Table 16

E.O.F. Percent of New Jersey Full-Time First-Time Freshmen in New Jersey Public Senior Colleges and Universities: Fall 1985

	E.O.F. % Of Total 1985	# of Fall '85 E.O.F.	# of Fall '85 N.J. FTFTF
Camden C.A.S.	11.8	46	390
Newark C.A.S.	16.6	106	639
Nursing	17.5	11	63
Cook	6.6	30	454
Douglass	6.3	47	745
Engineering	9.4	58	619
Livingston	8.7	51	588
Rutgers	7.7*	144*	1,867
TOTAL, RUTGERS UNIVERSITY	**9.2**	**493**	**5,365**
N.J.I.T.	**14.8**	**67**	**452**
Glassboro	12.4	107	863
Jersey City	24.2	102	421
Kean	12.8	124	965
Montclair	12.3	166	1,345
Ramapo	19.2	86	449
Stockton	12.1	89	736
Trenton	7.7	74	965
Wm. Paterson	10.1	109	1,082
TOTAL, STATE COLLEGES	**12.6**	**857**	**6,826**
GRAND TOTAL, ALL PUBLIC FOUR-YEAR	**11.2**	**1,417**	**12,643**

Sources: N.J. HEGIS form #20485, Parts 3a-3u (summed) for New Jersey residents; E.O.F. fall enrollment reports.

*Includes E.O.F. students in the College of Pharmacy, which does not have its own E.O.F. program.

Table 17

E.O.F. Percent of New Jersey Full-Time First-Time Freshmen in New Jersey Community Colleges: Fall 1985

	E.O.F. % Of Total 1985	# of Fall '85 E.O.F.	# of Fall '85 N.J. FTFTF
Atlantic	13.0	57	439
Bergen	7.9	95	1,208
Brookdale	6.5	74	1,134
Burlington	9.7	67	690
Camden	10.3	109	1,060
Cumberland	24.0	64	267
Essex	35.2	289	820
Gloucester	11.8	64	544
Hudson	11.2	86	769
Mercer	8.0	83	1,040
Middlesex	7.2	79	1,091
Morris	1.5	27	1,813
Ocean	7.4	71	960
Passaic	34.5	144	418
Salem	26.6	46	173
Somerset	5.0	31	619
Union	7.0	66	947
TOTAL, COMMUNITY COLLEGES	**10.4**	**1,452**	**13,992**

Sources: N.J. HEGIS form #20485, Parts 3a-3u (summed) for New Jersey residents; E.O.F. fall enrollment reports.

Table 18

E.O.F. Percent of New Jersey Full-Time First-Time Freshmen in New Jersey Independent Colleges and Universities: Fall 1985

	E.O.F. % Of Total 1985	# of Fall '85 E.O.F.	# of Fall '85 N.J. FTFTF
Bloomfield	19.9	38	191
Caldwell	22.6	14	62
Centenary	16.6	25	151
Drew University	8.5	14	165
Fairleigh Dickinson University	8.4	68	811
Georgian Court	16.2	17	105
Monmouth	5.7	23	402
Princeton University	2.3	4	175
Rider	5.1	28	553
Saint Elizabeth's	14.1	11	78
Saint Peter's	10.7	44	413
Seton Hall University	7.5	67	895
Stevens Institute	3.7	10	273
Upsala	19.0	49	258
Westminster Choir	27.3	6	22
TOTAL, INDEPENDENT COLLEGES	**9.2**	**418**	**4,554**

Sources: N.J. HEGIS form #20485, and Parts 3a-3u (summed) for New Jersey residents; E.O.F. fall enrollment reports.

Table 19

TOTAL AND TENURED FACULTY* IN ALL NEW JERSEY COLLEGES AND UNIVERSITIES, BY COLLEGIATE SECTOR

	Fall 1977			Fall 1985		
	# Fac.	# Ten'd	% Ten'd	# Fac.	# Ten'd	% Ten'd
Rutgers University	2,011	1,043	51.9	1,981	1,282	64.7
N.J.I.T.	268	162	60.4	307	181	59.0
U.M.D.N.J.	537	287	53.4	851	337	39.6
State Colleges	2,652	1,977	74.5	2,354	1,884	80.0
Community Colleges	1,900	1,346	70.8	1,902	1,494	78.5
Independents	2,523	1,542	61.1	2,590	1,624	62.7
TOTAL	**9,891**	**6,357**	**64.3**	**9,985**	**6,802**	**68.1**

*Includes all full-time instructional faculty.

Table 20

DISTRIBUTION BY RANK OF FACULTY* IN NEW JERSEY COLLEGES AND UNIVERSITIES, BY COLLEGIATE SECTOR

	Fall 1977					Fall 1985				
	Prof.	Assoc.	Ass't.	Others	Total # (100%)	Prof.	Assoc.	Ass't.	Others	Total # (100%)
Rutgers University	27.6	25.8	32.7	13.9	2,011	33.4	33.2	23.2	10.2	1,981
N.J.I.T.	26.1	34.3	31.7	7.9	268	26.7	35.5	17.9	19.9	307
U.M.D.N.J.	30.0	26.8	34.3	8.9	537	32.4	27.3	27.0	13.3	851
State Colleges	20.9	26.4	39.6	13.1	2,652	30.8	32.6	33.8	2.8	2,354
Community Colleges	7.8	24.6	40.9	26.7	1,900	18.0	34.3	32.1	15.6	1,902
Independents	33.1	27.5	29.6	9.8	2,523	38.0	26.5	28.1	7.4	2,590
TOTAL	**23.5**	**26.4**	**35.4**	**14.7**	**9,891**	**30.8**	**31.1**	**28.8**	**9.3**	**9,985**

*Includes all full-time instructional faculty.

Table 21a

NEWLY HIRED FULL-TIME FACULTY IN NEW JERSEY PUBLIC COLLEGES AND UNIVERSITIES, BY COLLEGIATE SECTOR

	1982–83 New Hires				1983–84 New Hires			
	Total (100%)	Women	Black	Hisp.	Total (100%)	Women	Black	Hisp.
Rutgers University	117	33.3	3.4	2.6	137	31.4	5.1	6.6
N.J.I.T.	28	10.7	3.6	—	34	8.8	2.9	—
U.M.D.N.J.	61	40.4	9.6	5.8	60	36.7	3.3	3.3
State Colleges	142	34.5	10.6	3.5	119	39.5	11.8	3.4
Community Colleges	119	52.9	8.4	.8	109	63.3	7.3	5.5
TOTAL	**468**	**38.2**	**7.4**	**2.6**	**459**	**40.1**	**7.0**	**4.6**

Table 21b

NEWLY HIRED FULL-TIME FACULTY IN NEW JERSEY PUBLIC COLLEGES AND UNIVERSITIES, BY COLLEGIATE SECTOR

	1984–85 New Hires				1985–86 New Hires			
	Total (100%)	Women	Black	Hisp.	Total (100%)	Women	Black	Hisp.
Rutgers University	161	42.2	5.6	3.1	167	41.9	3.6	2.4
N.J.I.T.	17	17.6	—	5.9	22	4.5	13.6	4.5
U.M.D.N.J.	43	39.5	7.0	—	63	28.6	7.9	11.1
State Colleges	152	44.1	14.4	5.3	120	50.0	8.3	4.2
Community Colleges	112	68.8	8.9	1.8	110	67.3	10.0	3.6
TOTAL	**485**	**47.8**	**9.1**	**3.3**	**482**	**46.3**	**7.3**	**4.4**

Table 22

FULL-TIME EMPLOYEES IN NEW JERSEY PUBLIC COLLEGES AND UNIVERSITIES* BY EMPLOYMENT CATEGORY,** SEX, AND RACE/ETHNICITY

	1977-78 Employees				1985-86 Employees			
	Total # (100%)	% of Total Women	Black	Hispanic	Total # (100%)	% of Total Women	Black	Hispanic
Exec./Admin./Managerial	1,274	20.9	12.5	2.2	1,322	32.6	14.1	2.4
Faculty	7,399	30.9	5.5	1.7	7,148	32.9	5.6	2.0
Non-Fac. Prof'l	1,595	50.0	14.7	3.3	2,202	56.5	15.9	4.6
Non-Prof'l.	8,884	59.4	18.7	3.9	9,041	61.4	21.3	6.5
TOTAL	**19,152**	**45.1**	**12.9**	**2.9**	**19,713**	**48.6**	**14.5**	**4.4**

*Excludes U.M.D.N.J. in both years, because their 1985-86 data are not comparable to their data for previous years. Including U.M.D.N.J. in 1985-86 raises the overall proportions of women and blacks (to 50.8% and 19.6%, respectively), and lowers slightly that of Hispanics (to 4.3%). This pattern obtains for each employment category, with the exception of faculty, where inclusion of U.M.D.N.J. lowers the proportions of women and blacks, and administrators, where it raises the proportion of Hispanics.

**The employment categories are defined according to the principal activities of employees.

Executive, Administrative, and Managerial – have major responsibility for the management of the institution or of a customarily recognized department or division.

Faculty – conduct instruction, research, or public service as a principal activity; hold academic rank titles.

Professional Non-faculty – engage in principal activities (other than those of faculty or administrators) which require specialized professional training.

Non-professional – includes clerical or secretarial, technical or para-professional, skilled crafts, and service or maintenance.

Table 23

PROJECTS APPROVED FOR FURTHER DEVELOPMENT UNDER THE INSTRUCTIONAL PORTION OF THE JOBS, SCIENCE AND TECHNOLOGY BOND ACT

College	Project Title	Recommended Funding
Kean College of New Jersey*	Computer-Integrated Design and Manufacturing, A Consortium: Higher Education, Organized Labor, Business and Industry	$1,800,000
Stockton State College	Horizons of Science: A Plan for the Improvement of the Study of Science and Technology at Stockton State College	$2,000,000
Trenton State College	Expansion of Facilities for the School of Technology and the Center for Manufacturing Automation at Trenton State College	$1,800,000
Rutgers, The State University	Biotechnology at the Newark Campus of Rutgers, The State University	$2,000,000
Fairleigh Dickinson University	Undergraduate Program Enhancement in Telematics and Photonics	$1,200,000
Monmouth College	Construction of a High Technology Facility	$1,200,000
Seton Hall University	Major Undergraduate Laboratory Renovations at Seton Hall University	$1,800,000
Stevens Institute of Technology	The CREATE Project	$3,400,000
Brookdale Community College	Marine Science Education: A Joint Program Between Brookdale Community College and Monmouth County Vocational School District	$ 166,666
Camden County College	Laser Electro-Optic Technology Facility Expansion	$1,100,000
Camden County College**	South Jersey CIM (Computer-Integrated Manufacturing) Consortium First-Year Equipment Proposal	$2,000,000
Cumberland County College	Fisheries and Marine Technology	$ 370,000
Cumberland County College***	Plastics Processing Technician Program	$ 700,000
Mercer County Community College	CIM CENTRAL: A Central New Jersey Computer-Integrated Manufacturing Technician Education Center	$ 894,850
Mercer County Community College	A Community College/AVTS Partnership for Computer-Integrated Manufacturing	$ 166,666
Middlesex County College	Technical Services Center	$2,000,000
Union County College	CAD/CAM for the Mechanical Engineering Technology and Machine Shop Programs	$ 166,666

*Consortium, with Brookdale Community College, Somerset County College, and Union County College

**Consortium, with Atlantic Community College, Burlington County College, Cumberland County College, Gloucester County College, and Salem Community College

***Consortium, with Hudson County Community College

APPENDIX B

OVERSIGHT PANELS

State College Challenge Grants

Terrel H. Bell
Former U.S. Secretary of Education
Professor of Educational Administration
University of Utah

Kenneth B. Clark
Member, N.Y. Board of Regents
Distinguished Professor of Psychology
City College of the City University of New York

Barbara W. Newell
Former Chancellor of the State University System of Florida
Visiting Scholar, Harvard University

Instructional Portion of the Jobs, Science and Technology Bond Act

W. Dale Compton
Vice President for Research
Ford Motor Company

Sherry H. Penney
Vice Chancellor for Academic Programs and Policy Planning
State University of New York (SUNY) System Office

David V. Ragone
President
Case Western Reserve University

John Truxal
Distinguished Teaching Professor
Department of Technology and Society
College of Engineering and Applied Sciences
State University of New York at Stony Brook

COMMUNITY COLLEGE STUDY COMMISSION: A PANEL TO STUDY THE MAJOR EDUCATIONAL ISSUES PERTINENT TO THE FUTURE HEALTH AND VITALITY OF THE COUNTY COMMUNITY COLLEGES

Joseph Shenker, Co-Chairman
President
Fiorello H. LaGuardia Community College (New York)

Joshua L. Smith, Co-Chairman
Chancellor
California Community Colleges

Alfredo G. de los Santos
Vice Chancellor for Academic Affairs
Maricopa County Community College District (Arizona)

Judith S. Eaton
President
Community College of Philadelphia

Harold L. Hodgkinson
Senior Fellow
American Council on Education

Richard C. Richardson
Professor of Higher Education
Associate Director of the National Center for Postsecondary Governance and Finance
Arizona State University

Brunetta R. Wolfman
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Roxbury Community College (Massachusetts)

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Assistant Dean for Academic Affairs
Mercer County Community College

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Richfield, New Jersey

Kwaku Armah
Director, Educational Opportunity Fund Program
New Jersey Department of Higher Education

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Educational Testing Service

Madan Capoor
Director of Institutional Research
Middlesex County College

William Daly
Professor of Political Science
Stockton State College

Jane Gottfried
Office of Research and Academic Policy
Rutgers University (New Brunswick)

Maria Gushanas
Coordinator of Basic Skills in Mathematics
Seton Hall University

Robert Jeffers
Associate Dean for Academic Administration and Developmental Education
Rutgers University (New Brunswick)

Frederic F. Kreisler
Director, Office of the State University and Professional Schools
New Jersey Department of Higher Education

Anthony D. Lutkus
Director, Basic Skills Assessment Program
New Jersey Department of Higher Education

Robert Lynch
Professor of English
Associate Chairman, Department of Humanities
New Jersey Institute of Technology

Richard Nurse
University Administrator for EOF/Veterans Affairs
Rutgers University (New Brunswick)

Daniel O'Day
Professor of English
Kean College of New Jersey

Charles Pine
Professor of Physics
Newark College of Arts and Sciences, Rutgers University

Don Raske
Educational Testing Service

ADVISORY COMMITTEE FOR COLLEGE OUTCOMES EVALUATION PROGRAM

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Brookdale Community College

Thomas Bridges
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Montclair State College

Paolo Cucchi
Dean of the College
Drew University

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Professor of Political Science
Stockton State College

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New Jersey Department of Higher Education

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New Jersey Institute of Technology

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Princeton University

Arthur Greenberg
Professor of Chemistry and Chemical Engineering
New Jersey Institute of Technology

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Student
Kean College of New Jersey

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Graduate School of Education, Rutgers University

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Coca-Cola Company
City Councilman, Montclair

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Vice President and Company Secretary
Prudential Insurance Company, Newark

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Superintendent of Schools
Lenape School District

Frederic F. Kreisler
Director, Office of the State University and Professional Schools
New Jersey Department of Higher Education

Kerry Perretta
Chief of Staff
New Jersey Department of Civil Service

Albert Porter
Assistant Dean for Academic Affairs
Mercer County Community College

Margaret Rivera
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Bell Communications Research

Tammi H. Schaeffer
Student
Douglass College, Rutgers University

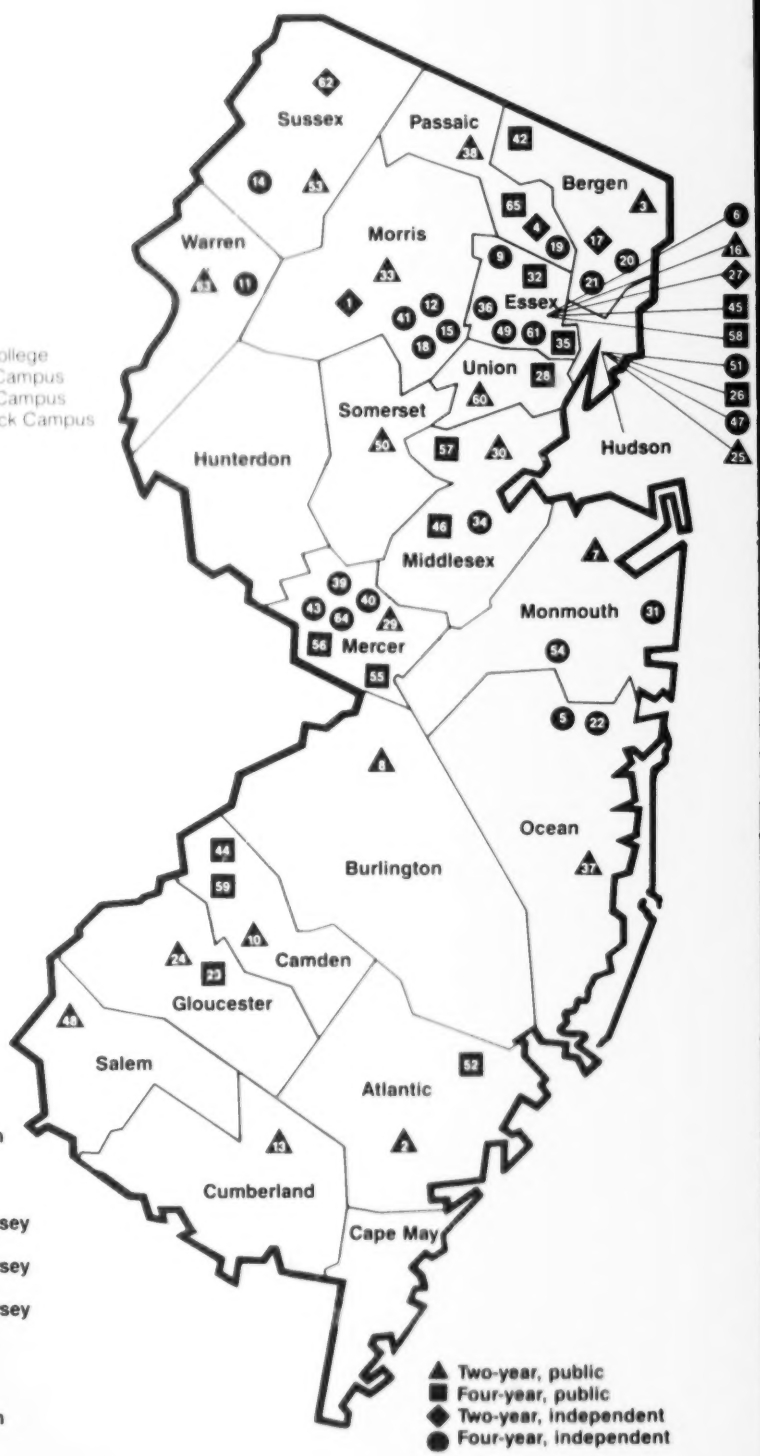
Robert L. Shaughnessy
Corporate Vice President for Personnel
AT&T

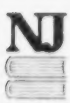
Greta Shepherd
Superintendent
Mercer County School System

Vivien Tartter
Associate Professor of Psychology
Rutgers University (Camden)

Nathan Weiss
President
Kean College of New Jersey

1. **Assumption College for Sisters**
2. **Atlantic Community College**
3. **Bergen Community College**
4. **The Berkeley School**
5. **Beth Medrash Govoha**
6. **Bloomfield College**
7. **Brookdale Community College**
8. **Burlington County College**
9. **Caldwell College**
10. **Camden County College**
11. **Centenary College**
12. **College of Saint Elizabeth**
13. **Cumberland County College**
14. **Don Bosco College**
15. **Drew University**
16. **Essex County College**
17. **Fairleigh Dickinson University,** Edward Williams College
18. **Fairleigh Dickinson University,** Florham-Madison Campus
19. **Fairleigh Dickinson University,** Rutherford-Wayne Campus
20. **Fairleigh Dickinson University,** Teaneck-Hackensack Campus
21. **Felician College**
22. **Georgian Court College**
23. **Glassboro State College**
24. **Gloucester County College**
25. **Hudson County Community College**
26. **Jersey City State College**
27. **Katharine Gibbs School**
28. **Kean College of New Jersey**
29. **Mercer County Community College**
30. **Middlesex County College**
31. **Monmouth College**
32. **Montclair State College**
33. **County College of Morris**
34. **New Brunswick Theological Seminary**
35. **New Jersey Institute of Technology**
36. **Northeastern Bible College**
37. **Ocean County College**
38. **Passaic County Community College**
39. **Princeton Theological Seminary**
40. **Princeton University**
41. **Rabbinical College of America**
42. **Ramapo College of New Jersey**
43. **Rider College**
44. **Rutgers University at Camden**
45. **Rutgers University at Newark**
46. **Rutgers University at New Brunswick**
47. **Saint Peter's College**
48. **Salem Community College**
49. **Seton Hall University**
50. **Somerset County College**
51. **Stevens Institute of Technology**
52. **Stockton State College**
53. **Sussex County Community College Commission**
54. **Talmudical Academy**
55. **Thomas A. Edison State College**
56. **Trenton State College**
57. **University of Medicine and Dentistry of New Jersey** Piscataway Campus
58. **University of Medicine and Dentistry of New Jersey** Newark Campus
59. **University of Medicine and Dentistry of New Jersey** Camden Campus
60. **Union County College**
61. **Upsala College, East Orange**
62. **Upsala College, Sussex**
63. **Warren County Community College Commission**
64. **Westminster Choir College**
65. **William Paterson College of New Jersey**





Design by DANA • Typesetting by Optima • Printing by Hermitage Press